

An artistic illustration of two birds in a winter setting. The upper bird is a vibrant red cardinal perched on a snow-covered pine branch. The lower bird is a brown and white striped sparrow, also on a snow-covered branch. The background is a soft-focus view of a snowy forest with evergreen trees.

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JOHN W. TAYLOR

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IN THIS ISSUE	PAGE
Editorial: More Wood Ducks Where You Live	3
Letters	3
Rabbits Behind a Fence	4
Varmint in the Garden	6
Your Own Muzzle-Loader	8
Let's Cook Quail	9
Only Old Bonehead Knows	10
Commission-Owned Lakes: Powhatan Lakes	12
Conservationgram	13
Johnboat: Not for Sale	14
Observations from the Drumming Log	16
Points A-Plenty	18
Purple Martins, Nature's Insecticide	19
Bird of the Month: Goldfinch	23
The Drumming Log	24
Youth Afield	25
On the Waterfront	26
Trophy Fish Citation Contest	27
Pictorial: Hunting Dogs	28

COVER: Somebody called it purple finch and the name stuck, but as Roger Tory Peterson notes in his *Field Guide to the Birds*, the color is more like raspberry or old-rose ("like a sparrow dipped in raspberry juice"). Anyway, though it nests in boreal, evergreen forests, it is a frequent winter visitor to our bird feeders. Our artist: John W. Taylor, Edgewater, Maryland.

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More Wood Ducks Where You Live

BY any standard of measurement, the wood duck rates an undisputed high place among the loveliest of wild creatures. It is one of the few ducks that nests consistently in trees. It gets along fairly well with people, too, where people are reasonably considerate of its needs, including the need for a little privacy and freedom from harassment. In seeking a nesting site it will often resort to openings around the eaves or chimneys of deserted buildings, but will not stoop to nesting on the ground no matter how frustrating its search for a home.

We almost lost our "woodies" once, and the birds got complete protection from hunting from 1918 to 1941 or they might not have survived. Now they have made a remarkable comeback, and are abundant in many places. Still, there is little potential wood duck habitat in Virginia that is completely utilized. In other words, we *could* have a lot more wood ducks than we do have. Why don't we?

The main answer seems to be that the wood duck faces a perennial housing shortage, and this we *can* do something about, if we really want to see more wood ducks using all the suitable ponds and miles of wooded streams throughout Virginia.

The female wood duck prefers to nest in a hole, high in a tree, perhaps a hollow chiseled out by a long departed pileated woodpecker. But she will use artificial nesting boxes. Large trees with suitable holes in them have been hard to find in recent years, since most of the old, mature forest trees that once lined our bottomlands are gone. We cannot replace the old hollow trees, but we can, fairly easily and cheaply, substitute plenty of wood duck nesting boxes.

Wood duck boxes should be placed on a pole over water, or in a tree, not over 100 to 200 feet from the water's edge, at a height of 15 to 20 feet. They should be about 10 inches square inside, two feet in height, and have a four-inch entry hole near the top. A small drainage hole should be drilled in the bottom, and about four inches of wood shavings placed inside as nesting material. Old, weathered scrap lumber and slabs make excellent building material.

Within a day after young wood ducks hatch, they have to climb out of their hollow, for they are not fed at the nest. The mother calls them from outside, but she won't help them climb out. They come equipped with strong claws on their tiny feet, and sharp hooks on their beaks, which they can use to inch their way up the rough inside of a tree hollow. But it is important, in building a nesting box, to be sure that its straight sides and smooth interior do not constitute an escape-proof trap for the ducklings. Inclining the box slightly forward at the top so the front is not quite vertical is a big help, but there also should be some footholds on the inside between the top of the nesting material and the exit hole. If a box is made of metal, then it is especially important that a piece of rough wood be fastened inside below the exit hole, with strips tacked on for climbing, or the intended nesting site will be nothing more than a death trap.

The "woodie" nests all over Virginia, but prefers our sheltered inland waters and seldom visits the seacoast. Any farm pond bordered by trees, or any stretch of woodland stream, might support a family or two of wood ducks if nesting sites were present. There is hardly a county in the state in which wood ducks would not benefit from nesting boxes properly constructed and located.

Now is the time to get busy, if you want more wood ducks where you live. Nesting boxes erected in February or early March will be on the market none too soon for this year's house hunting, for the wood duck is an early nester.—J. F. Mc.

Quite a Thrill!

SHORTLY before 10 a.m. on April 29, 1967, I shot a 23-pound wild turkey on Paris Mountain in Clarke County (checking station 199, game tag 98876). I got him with my 12-gauge Parker, using #4 shot, at about 40 yards.



This beautiful bird, being my first, was quite a thrill for me. I am enclosing a photograph of my trophy should you desire to show it in *Virginia Wildlife*.

H. C. Cregger, Sr.
Vienna

Seeks Black Squirrel Records

IN late November, Game Biologist Johnny Redd collected two black-phase gray squirrels on the Powhatan Wildlife Management Area in Powhatan County. The photo of these two squirrels, both immature, with an adult of normal color, is enclosed.



It occurred to me that you might be interested in running this photo in *Virginia Wildlife* and if other records of black squirrels from eastern Virginia come forth as a result, I would like to know of them.

Dr. Henry S. Mosby
VPI Dept. of Forestry and Wildlife
Blacksburg

The editor knows of one authentic record in eastern Virginia, although he has not had an opportunity to check the area in recent years. There used to be a fairly high ratio of black phase to gray in a squirrel population in lower Prince William County, east of U. S. Route 1, between Quantico Creek and Fuller Road which connects Quantico with Route 1. Anyone else know of black squirrel sightings in Virginia?—Ed.

Rabbits Behind a Fence

By W. H. TAYLOR
District Game Biologist

A COOPERATIVE venture undertaken four years ago on the Game Commission's Weston Refuge in Fauquier County has produced one of the finest beagle field trial areas in existence and has also afforded Commission biologists an opportunity to record some useful observations on the ups and downs of an isolated cottontail rabbit population confined within an intensively managed rabbit enclosure.

Most "Cooperative Agreements" made by the Virginia Commission of Game and Inland Fisheries have been with government agencies or private landowners on large tracts of land on which the Commission did game management work and the landowner, in return, permitted the public to hunt on the premises.

The Weston rabbit field trial area is a cooperative agreement in reverse. The field trial area is located on

The enclosure was saturated with imported rabbits, and intensive habitat management and artificial feeding were undertaken in an effort to maintain the high population.



Commission photo by Kesteloo

Rabbit-proof fence keeps rabbits in, ground predators out, but its greatest value may be in limiting the ground over which the chase may lead and thus making dog handling easier during field trials.



state-owned Weston Wildlife Refuge at Casanova, Virginia, about six miles southeast of Warrenton. On this area the Fauquier Beagle Club does the management work with the technical assistance of Game Commission biologists and game wardens. The area is open for rabbit field trials during the field trial season. Because of the stipulations in the will of Miss Charlotte Nourse by which the Commission obtained the 270-acre Weston Wildlife Refuge, it may never be opened to public hunting with firearms or other lethal weapons. The Commission felt that field trials were a good way to utilize the area by hunting-oriented sportsmen.

In 1963 the Fauquier Beagle Club was permitted to enclose a beagle field trial area of approximately 80 acres with a rabbit-proof woven wire fence. This fence, constructed of 2" mesh chicken wire, is five feet high with about one foot laid out on the ground inside the fence. It is topped by a single strand of barbwire. This cost the Fauquier Beagle Club approximately \$1500. In the spring of 1966, as an added obstacle to climbing predators, a single strand electric fence was installed on the outside about one foot from the top of the woven wire. Originally, the club was only permitted to build the fence and erect temporary kennels while the Commission furnished outdoor toilet facilities. In 1965 the Beagle club requested, and was granted, permission to dig a well and build a cinder-block clubhouse and permanent kennels. These facilities, built and paid for by the club, became the property of the state with the club having use of all facilities as long as the agreement remains in effect.

The enclosed area is approximately 40% mature hardwoods and 60% abandoned pasture. The mature hardwood section was selectively cut in 1960. The pasture is grown up to red cedar, persimmon, coralberry and honeysuckle, but includes some sections of open grass of poor quality.

Management work included building the fence, planting food patches, clearing trails and clearings and making brush piles, liming and fertilizing the open areas, and installing artificial feeding stations. Annual mix, small grain, clover and rape were planted in patches and strips. Brush was cut to clear trails and patches, and the brush was piled to make

escape cover for rabbits. Red cedars, where practical, were partially cut and pushed over to make more permanent, living brush piles. Each August or September, starting in 1964, a bushhog has been used to clear trails and to clip honeysuckle and other weeds.

This bushhogging furnished clear trails for the field trial spectators, and caused fresh green growth to be produced for improved rabbit food during the early fall and winter. Artificial feeders, made by cutting the tops from junked autos, were placed throughout the area for feeding during critical periods. To better utilize the wooded area, several clearings of $\frac{1}{8}$ to $\frac{1}{4}$ acre were cut in areas where there were few or no mature trees.

When the area was first fenced in 1963 the club saturated the area with imported rabbits, in addition to the native population. This saturation created problems of food supply and the possibility of introducing tularemia or other diseases or parasites. Tularemia, commonly known as rabbit fever, is known to have occurred in other fenced rabbit field trial areas where imported rabbits were used to saturate the population.

It was in order to sustain the high rabbit population within the enclosure that the club undertook to increase natural food and cover supplies by intensive habitat manipulation, and carried out its artificial feeding program during the most critical periods of the year.

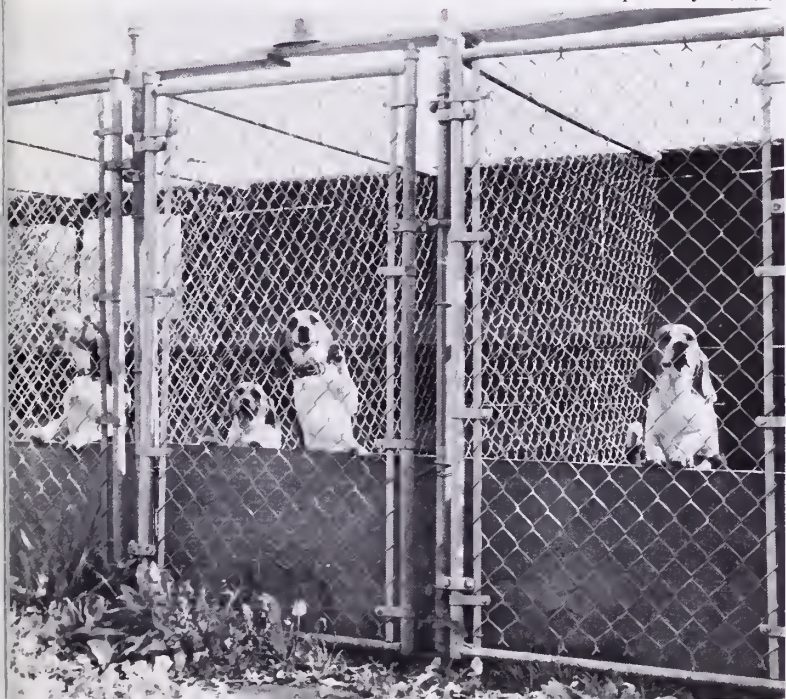
The rabbit population remained high throughout the 1963-1964 winter, although during heavy snows in February there appeared a heavy browse line on honeysuckle and low brush. The browse line extended from snow level upward to 12-18 inches. No dead or sick rabbits were found, but a high population of rabbits was indicated at all times during that winter. The vegetation recovered but prolonged drought during the summer months retarded natural growth and drastically reduced effectiveness of planted food patches.

Wildlife census work during the winter of 1964-65 on the area indicated a drop in the rabbit population. Checks inside and outside the enclosed area resulted in estimates of *approximately the same density of rabbits inside and outside the fence*. The unfenced area censused was of habitat similar to that in the enclosure and was judged to have a fairly normal rabbit population at the time.

There appeared a definite drop in the rabbit population

Permanent kennels built on Weston Refuge in 1965 by Fauquier Beagle Club for use during field trials.

Commission photo by Kesteloo



during the summer and fall of 1965, and it was suspected that disease such as tularemia might be present. Sight observations during the summer indicated a shortage of young rabbits compared with the previous summer. A thorough search of the area in February 1966 by Game Commission biologists and Virginia Wildlife Research Unit personnel found no proof that tularemia or any other disease was present in epidemic proportions. All rabbits jumped appeared healthy, and no dead carcasses were found to indicate disease.

Due to drought conditions each summer from 1963 to 1966, with 1965 being the worst, it appears that the carrying capacity within the enclosure dropped each year after the enclosure was established and reached a low in 1965. Conditions of the vegetation improved somewhat in 1966, and young rabbits were observed throughout the summer. Club members reported adequate rabbits in the area, and the field trials were successful during the 1966-67 field trial season.

With an improvement in growing conditions during 1967 the field trial season started with what appeared to be a normal population of rabbits.

The Fauquier Beagle Club holds an average of one club trial each month during the field trial season, September to April. The Weston area lies in gently rolling terrain, furnishing easy walking for the followers of the little hounds and good running for the beagles. Most beaglers who have run dogs there comment that it is one of the best such field trial areas in the country. The big trial of the year is held in April, usually the second week end.

Beagles are divided into two classes, 13" and 15", and are run in braces. With only two beagles working at a time, the big trial usually lasts three or four days. It is an AKC-approved event and usually runs 250 to 300 beagles with 300 to 500 handlers, owners and spectators attending. Monthly club trials usually run from 50 to 100 beagles, with about 75 members and guests attending. In addition to running the scheduled trials the club members, numbering 40 to 50, utilize the enclosure for training dogs during the season. The rabbit field trial area has made possible about 1200 to 1500 man-days of recreational use of an area that otherwise could not have furnished any hunting at all.

It might be asked: Was the fencing of the enclosure worthwhile? From the beagle handlers' point of view, it was, because it limited the area within which the rabbits can run and where the beagles would follow. Generally, it is agreed that a fence is needed to have a successful rabbit field trial area.

However, the need for a *rabbit proof* fence is questionable, and the results of artificial stocking are temporary at best. Of course, a fence does keep the rabbits in the area from drifting outside, and with an electric strand it keeps mammalian predators out. But any habitat can support only a limited population of any species, and this limit is fixed not only by food and cover supplies but also by such subtle factors as the species' tolerance for crowding. At Weston, an extraordinarily high rabbit population was produced by releasing imported bunnies in a rabbit proof enclosure. In spite of intensive efforts to maintain this unnaturally high population, within a year or less the rabbit density within the enclosure was about the same as that on the other side of the fence! Happily, however, this normal rabbit population, in an area in which the vegetation is manipulated to benefit both the hunted and the hunter, has turned out to be quite adequate after all.

VARMINT IN THE GARDEN

By MILDRED LINEBERRY
Tazewell



Section 29-158 of the Code of Virginia prohibits the importation into the State of any live predatory animal without a permit. The story of Burkes Garden's unwelcome "varmint" shows why such a law is needed, and why such permits are seldom issued.

IN the southwest corner of Virginia, in that section of the state which wedges its way in between Kentucky and West Virginia to the north and Tennessee and North Carolina to the south, lies the unheralded hamlet of Burkes Garden.

This is Blue Ridge country, mountainous, harshly rugged except for the areas where nature has left a hollow. Burkes Garden is such a place. Deep in a bowl-shaped recess, sheltered on the north by Rich Mountain and to the south

by Brushy, it is, as its name implies, a rolling, gentle garden almost isolated in the midst of steep, heavily timbered country.

Like any garden, it is a peaceful region and rarely knows any extreme violence. Burkes Garden is a pastoral place, the home of prosperous sheep and cattle farms. The last destruction it had known was a brief period during the Civil War. Until the winter of 1952.

The day which dawned cold and wintry was Washington's

birthday, February 22, but the air of the men who gathered was not that of a holiday.

While T. P. Goodwin was enjoying a leisurely shave a phone call brought word that "the varmint" had been cornered on Meek's Ridge. Still half shaved, Goodwin wiped the lather from his face and hurried out to spread the alarm.

Hugh Cox got the word by phone, too. He rose from an unfinished breakfast, brought out his shotgun, and was ready and waiting when four other armed men drove up in a car.

Men like Goodwin passed the word that morning, and men like Cox reached for guns, as more than 150 sharpshooters poured out of the hills and valleys of Tazewell County, Virginia. Led by a professional hunter, they closed in on Meek's Ridge with what one member of the expedition later described as "enough armed men to run an elephant drive."

Tazewell County farmers mustered this armed might against an animal which proved to be no bigger than a dog. They called it "the varmint," for lack of more positive identification, and they closed in to kill it without knowing what it was. They were under no misapprehension, however, as to why they wanted it dead. The varmint had developed a taste for sheep—a taste which it carried to pretty expensive lengths—and it had bested the woods-wise men of the county until it became a living affront to their pride. It was wanted, in short, for a record like this:

It killed at least 410 sheep, including some prize breeding stock, to run up a damage bill of more than \$23,000.

It outran, outwitted and generally disgraced some of the best trail hounds in Virginia.

It turned up a suspicious nose at more than 200 well-laid traps.

It made sport of hunters. One man went out to trail the varmint, and found that the varmint was trailing him.

Before it was over an insurance company declared the varmint to be a natural disaster, the kind you can't insure against, and county authorities placed a \$2,000 price on the animal's head.

As is usually the case, the varmint acquired a reputation even worse than its record. Some said that it had the strength of a leopard, and that it left tracks the size of a man's hat. It was declared variously to be a fox and a timber wolf, and a few of the more imaginative thought it might be some unnatural combination of the two.

The practical man dismissed these speculations, and declared that it was just a good dog gone bad. This view was especially practical because under Virginia law the state pays for damage when a dog kills sheep.

In fact, however, all of these guesses were wrong. When the varmint held still to be identified—which was after it absorbed a volley of gunfire at point blank range—it proved to be a coyote from the western prairie. It was 800 miles from home, but in all other respects it had been operating in strict adherence to coyote style.

The coyote is a rugged individualist by even the toughest standards of nature's world. It thrives on opposition, and contrives by cunning to maintain a wild freedom in the midst of man. This one was cunning, bold and mean. In Tazewell County it found conditions which suited it to a marked degree.

The county is situated just south of the West Virginia border, in a heavily wooded region of the Appalachian Mountains. It is not wild country exactly, but on the other hand it is not exactly tame. Men graze stock and plant crops in the valleys, but you can find deer sign by climbing the

nearest ridge. When the coyote appeared in this region, on February 7, 1952, it announced the fact by leaving a distinctive sign of its own. It slipped down that night from East River Mountain, invaded the farm of Frank Nash, and sank fangs into the throat of a sheep.

The killing was neatly done. A quick rush, one snap of the jaws and the sheep dropped where it stood. Nash sleeps lightly but he didn't hear a bleat.

Nash found the sheep the next morning, while the varmint was still toying at its breakfast. He got a snap shot as the killer streaked away, and he thought he saw the animal stagger and break stride. Whether wounded or not, the coyote evidently was impressed by the fact that Nash is a man who goes walking with a rifle in his hand. It crossed three mountains, took up residence at the other end of the county and never struck at the Nash farm again.

It struck elsewhere, however, and it became apparent shortly that Nash had missed a rare opportunity. Eleven months were to pass and some 350 sheep were to pass on before another man got a shot at the killer.

Two weeks after the close call with Nash the coyote appeared in the Burkes Garden area of the county. Burkes Garden is a big saucershaped valley rimmed by wooded ridges 2,000 feet high. The setup was made to order for varmint operations. The coyote could strike quickly from any point on the ridge line, and it settled down to make the most of this ideal condition.

The H. H. Lineberry farm, spread out at the base of Gose Ridge, became a favorite target. Lineberry lost the first sheep in Burkes Garden, and lost 90 more before it was over. It was on the Lineberry farm, too, that the coyote made its second slip.

Frazier Cornwell was driving cows early one morning when he spotted the varmint working toward a flock of sheep. Cornwell doubled over, shielding his body behind a cow's broad back; then he eased the cows toward the coyote. When he was about 30 yards away he straightened up suddenly and looked the killer in the eye.

Startled, the coyote made a catlike standing jump of six feet sidewise. It regained composure, however, before its feet touched the ground. Realizing somehow that Cornwell was not armed, it stood there, head cocked, returning the stare. Cornwell rushed back to the farmhouse but by the time he had his gun the varmint had vanished.

Cornwell failed to identify the killer as a coyote, but then it was the first coyote he had ever seen, so he confined most of his observations to an estimate of the varmint's disposition and character.

"It was a mean looking joker," he reported. "Real mean."

It was mean acting, too. The raids increased until they occurred almost nightly. The coyote never struck at the same place twice in a row, but it showed a marked preference for certain farms. Bob Davis lost 51 sheep before the raids ended, and Joe Moss lost 42. H. Brown Meek lost 41 out of his total flock of 86. Like Lineberry, all of them had farms that were too handy to a ridge.

Everett W. Wilson, the game warden, had to inspect each kill. It was a duty which he came to dread. Sheep killing dogs are not uncommon in this part of the country, and the state allows for the fact by paying sheep damage out of the dog-tax fund. The farmers claimed this refund on varmint kills. Most of them were honestly convinced that it was the work of a renegade hound. It was Wilson, however, who had to certify the fact, and he risked lifelong friendships by insisting that the killer was not a dog.

(Continued on page 21)

THE muzzle-loading long rifle seems to have been designed for over the fireplace. It is a decoration that gives a lean and graceful climax to the hearth scene. Long, flowing lines of the barrel and stock delight the eye, and the fine handwork on patchbox and trigger guard invite close inspection.

The muzzle-loader is a sure-fire conversation starter when company shows up, and you immediately have something in common with all gun owners. Few things can equal the pleasure of simply having a muzzle-loading rifle.

There are other, more sensual delights for the cap and ball addicts who actually shoot these old guns. The hoarse "Ka-BOOM" and great cloud of blue smoke that hangs in the air is most satisfying. You have the feeling you've shot a *real* gun.

The muzzle-loading rifle helped shape much American history. English-made fowling pieces (sort of a rifle-shotgun) provided the turkey for the first Thanksgiving dinner. Muskets won U. S. military battles and wars from Colonial days until the Spanish-American scuffle.



Your Own Muzzle-loader

The military rifle created more widows and orphans during our Civil War than any other infantry weapon. To most males, a muzzle-loader suggests visions of Indian warfare, the mountain fur trappers and close combat with great-fanged bears on treacherous trails.

There are added benefits when you shoot a muzzle-loader. There's the ammunition expense factor: One hundred rounds of lead ball, black powder charges and percussion caps will cost about a fourth that of a similar-caliber hunting rifle with factory-loaded ammo.

How to go about getting a muzzle-loader? You may have an old rifle or carbine ("short" rifle, for use by mounted troops) from your great-Grandfather's Civil War service. If so, the gun may be of wide bore (.50 caliber or larger) and will shoot like a small cannon—which it nearly is. And, since it requires more powder and lead per shot, it will be more expensive to shoot than a "small-bore" rifle, generally around .30 caliber.

Or, the attic could contain a finely made "squirrel rifle," the .22 rifle of yesteryear. These game rifles were once a part of every rural household, and were all-purpose weapons as necessary as the axe and butter churn.

Other possible sources include antique stores, pawnshops or gun collectors. Often, classified advertisements for household goods or country auctions will uncover one of these old guns.

One thing you should be aware of—the purchase price is only the first cost toward owning a gun you can shoot. And

this "down payment" can be misleading.

A reasonable price for an old muzzle-loader is an entirely relative thing. A muzzle-loader in top condition with accessories may be a bargain at \$200.00, if it dates from the famous Kentucky or Pennsylvania long-rifle era. And too, an original flint-lock will generally have more value than a rifle which was converted to percussion caps.

But then, a rifle you get for ten dollars, if poorly made and in bad shape, can be money wasted. Your bill for repair and rehabilitation could make a maharaja's eyes pop. The cost of putting the rifle in safe shooting condition can be far more than the price of the rifle.

Most of these old rifles can be fired, but that doesn't mean too much. The fact that the trigger mechanism works and the barrel is clear is important, certainly, but the gun should not be fired until it has been tested. For one thing, these guns were designed for black powder, which is much less powerful than some of the modern charges. For the person who overloads with black powder, or uses a modern smokeless powder, the result can be devastating. The breech can blow out, or the barrel may peel back as neatly as a banana.

So, safe shooting condition is the first requirement. A reputable gunsmith should "proof" or test the rifle before you toss it over your shoulder and head for the hills.

You might remember that a muzzle-loader shooter must be concerned with more than just the basic rifle. Equipment includes a bullet mold, powder flask, cap box, nipple wrench for cleaning, ramrod and bullet extractor. The cost of these items will run from \$25 to \$35.

Here are some checkpoints to help you decide whether you've located a rifle worth repairing and shooting.

Barrel finish—Is it smooth and without rough spots? If badly pitted or stained, it should be re-blued to protect the exterior. Cost—\$10 to \$15.

Wood parts—Are there cracks, chips or areas of dry rot anywhere on the forestock or shoulder piece? If the wood is so weakened that a new stock is necessary, you'd better estimate \$20 to \$30 for a replacement. Cost varies depending on the type of wood used and amount of decoration you want.

Trigger mechanism—The receiver area, trigger group and hammer should be free of corrosion and pits. Is the lock and trigger action smooth? New parts are needed if you locate deficiencies here. Figure about \$10 for the trigger mechanism. The trigger guard will run about half this amount; more if your rifle has the special set-trigger design.

Hammer, nipple and barrel base plug—If these parts are corroded or broken, replacements are needed. (These areas are especially vulnerable to corrosion because of the sulfides in black powder.) Replacement costs will run from \$2 to \$4 for these parts. Cost for all three may run \$8 or \$9.

Bore—The condition of the bore (inside of barrel) is a major point. If it has a normal accumulation of black powder residue and no more, it can be cleaned with a wire brush and powder solvent. The lands or grooves should be deep and sharp, to assure accuracy in firing. If the bore is in poor condition, it must be re-bored, a major repair job which will cost \$25 to \$35. Any gunsmith can give you an estimate for this work, and you may be able to get a much cheaper statement, especially if you have other repairs to be made.

Missing parts—Not surprisingly, old muzzle-loaders often lack parts. Since many of these rifles are one-of-a-kind, replacement may be difficult and parts may have to be made

(Continued on page 20)

NOT all game birds are improved by hanging until the flesh is high or seasoned. Several varieties become totally inedible if treated in this manner, and one of these is quail.

The quail or "Bobwhite" should be plucked and drawn as immediately after the kill as practical. Treated in this way they are a great delicacy.

The quail is a very small bird—one of our smallest game birds. It is about the size of a squab, and as with squab, the cook should plan on one for each guest—more if the occasion and appetites of the diners are known to warrant it.

The birds should be plump with firm white fat. They can



Commission photo by Kesteloo

THE HUNT IS OVER, SO

LET'S COOK QUAIL

By MARJORIE LATHAM MASSELIN
Richmond

be frozen for future use, but they are at their best when cooked fresh.

There are a number of wonderful things that can be done with quail, and your choice among these possibilities should be guided by the occasion.

If they are being served as brunch to people who have taken hearty early morning exercise, quail on toast is most probably the answer. If they will be one course at a formal dinner you might like the more glamorous Quail Normandy. If they are to be the main course at an elegant but informal buffet supper, then you might like to serve up a platter of Spit-Roasted Quail.

Spit-Roasted Quail

Spit roasting over a very hot, well banked charcoal fire is generally considered the classic method for preparing quail. Perfect results are always more likely with spit roasting because there the possibility of moist heat is eliminated entirely. One thing you don't want to do is steam them! However, if you do not have a spit—either a built-in electric one in the kitchen or the even more desirable open air charcoal fire which lends added flavor to the crisp skin—then by all means use the oven; just be careful to place the birds

on a rack in an uncovered roasting pan and baste frequently with fat, adding clarified butter if the quail have not enough fat of their own.

If you plan to use the oven method and want even surer results, poele the quail first, using plenty of clarified butter in a large saucepan. A copper pan is always best because of its even heat conducting properties. With even heat and careful turning at frequent intervals the birds will be cooked a delicate brown and the flavor of the butter will have been absorbed to add to their natural goodness. Finish the birds in a 400 degree oven for not more than three to five minutes. To serve you must work quickly to be sure that your quail are brought to the table hot. Decorate the legs with paper "frills" which can be purchased all ready made. Lay each bird on a slice of toast fried to a delicate brown on both sides. Be sure that you use butter for this; there will be plenty left from the poele process.

If this is to be a cold buffet, you can get even more elegant by preparing the quail ahead of time. Let them cool and then lay each bird in its own little basket of pastry.

To accomplish the pastry basket you will need forms. These can be improvised by shaping heavy-duty aluminum foil—two layers if necessary—into small rectangles just large enough to accommodate one quail. Invert the forms and shape the rolled, trimmed pastry over them, sealing the corners meticulously so that the aspic you will pour in later cannot leak out. Measure the perimeter of each, and shape a braid of pastry for the top rim—or what will be the top rim when they are baked and turned up. Secure the braid to each basket with water or egg. Brush each with egg yolk diluted with a little water, and bake until nicely browned and glossy at 400 degrees.

For the pastry a basic proportion of $1\frac{1}{8}$ cupfuls flour to a $\frac{1}{4}$ pound print of butter with enough ice water added to



Commission photo by Shomon

"hold" the dough is ideal. About four times this recipe will be enough to make 6 baskets.

The dough should be thoroughly chilled before handling, and should be rolled quite thinly, so that the baked shell is perfectly crisp.

When both quail and cases are cold, an aspic is poured over to fill and cover right up to the brim. Only the legs of each bird are above the basket, and these are decorated with paper frills. When the aspic is partially set, the top of each basket can be decorated with slices of black truffle,

(Continued on page 20)

ONLY OLD BONEHEAD KNOWS

(And He Isn't Telling)

By RALPH C. CLIFFORD
Plano, Illinois

IT was nearing season's end for coon hunting, a sport I followed avidly since boyhood. I was about recovered from an attack of gout and determined to go on one more hunt, in spite of my wife's sarcastic witticisms. Believing myself able to stand the rigors of such a venture, I phoned my friend, Bill "Monkey" Renche, who was also enjoying "failing health," to see whether he'd consider this risky proposal. Most surprisingly, he agreed with alacrity, saying, "'Boney' and me will be waiting for you tonight. Make it early. Mable's mother is coming over! Enough said?" Bill's mother-in-law is eighty three, spry as a chipmunk and sharp as a vote-seeker, and always needling him—something easy to do because thirty years in the plumbing business has made him very quick tempered. He was so glad for the excuse to get out that he forgot to give me the latest "info" on his ulcer and "bad back"—most unusual!

"Boney"—short for Old Bonehead—so named as a pup because he was such an oddball, is Bill's ancient "Mountain Cooner,"—a dog of most peculiar habits. Like his master, the hound is a "character," tho very intelligent. The two are almost inseparable.

Naturally, I'm called "Curly," having been bald as a cue ball since my twenties. Operating my garage has compensations, namely allowing considerable free time for outdoor activities. Bill and I have hunted together for many years, thirteen of them behind Old Bonehead. The dog likes me, and proves it on hunts by running back occasionally for physical inspections ever since the time my trick knee gave out completely and Bill strained his "bad back" while helping me to the car. He also likes my spouse, Bingo, who takes care of him when Bill and Mable are on vacation. Reason is, Bingo has never given him a bath, which Mable insists on doing at times.

About seven thirty I picked up Bill and "Boney," getting the usual greeting—a wet slurp-slurp on the face as the old hound settled his sixty pounds beside me. (He can't be made to ride in the back seat.) We parked at Steward's Mill, and went on through the hardwoods up the creek, under a new moon and brightly twinkling stars. It was a beautiful night to be out; once again I thought how there's nothing like a coon hunt to take one's mind off the stress of everyday living. Old B. ranged around, often emitting yelps and mild blasts of appreciation, but it was a couple of hours before he let go his thrilling, bugle trail voice. "Shucks," Bill observed mildly, "from where we are, I'll bet he'll tree in The Old Sycamore again."

The Old Sycamore was an enormous den-tree, standing majestically since before any of us can remember. There

was a big hole at its base, with the rotted hollow running well up, and many a coon had eluded us there. As always, we got a bit excited, and hustled along, to find that recent heavy storms had downed The Old Sycamore at last. It was broken off close to its roots, and "Boney" was baying tree at the still intact trunk's open end, more aroused and interested than I'd seen him in a long time.

Bill held the dog back, while I beat on the sycamore with a piece of heavy limb, without results. I then poked the longest stick I could find back in the hollow, hoping to scare the ringtail out, but he wasn't about to leave his safe retreat. "Boney" was having a real tizzy during these proceedings; neither of us could understand his undue excitement, and we had difficulty in convincing him to give up.

We hunted for another hour, but had no more action. On the way back, sure enough, Old B. whooped it up again at the down tree, but because there was no trail-talk from him we knew the raccoon had simply stayed put. Since this was probably our last hunt of the year, we wanted that coon for our men's club larder, and decided to return tomorrow



with an axe. After securely plugging the hollow with broken limbs and rocks, and inspecting the tree for other possible exit holes, we called it a night.

Next morning, carrying shotguns for possible rabbits in the thick brush along the valley's hills, we set out enthusiastically, with "Boney" happily (tho a mite stiff and sore) tagging behind. I lost the coin-toss, so had to tote the axe, which caused Bill to proclaim his luck was changing for the better. As we approached The Old Sycamore, Old B. forgot his aching joints suddenly, and was soon baying tree.

After we had cleared out the plug-up job, I took first turn with the axe and started to chop about twenty feet back, where I judged the hollow would be too small to harbor a coon. "Boney's" head was inside the open end, and Bill was standing close behind, chewing an ulcer pill, as I got on with it.

Unexpectedly, the hollow tree was a bedlam of hissing, snarling, yapping and spitting, and a big red fox, crazed



No matter who had bedded down in the hollow tree first, the fat old coon was plenty mad after being cooped up inside with the fox.

with fear, bowled "Boney" aside, bit Bill on the leg just above his shoe-pac, then took off at seventy five for the nearby hill. The dog was quick to recover, and frantic with eagerness lit out in full trail-cry to follow the fox out of sight in the brush. Poor Bill, profanely howling with rage and surprise, might have been nipped again if he hadn't jumped straight up as a fat old coon also emerged in great haste a few seconds behind Reynard. Spitting defiance, he scurried up a tall walnut tree, plenty mad. Who could blame him? While he's a physical match for any fox, they are natural enemies, and his temper was soured after being cooped up in such company. I wanted to laugh, but didn't dare, as Bill was violently angry and bellowing about getting hydrophobia from the fox bite while shooting at the coon with his .22 pistol. By now, Old Bonehead was wildly barking tree again, just over the hill. My part was very minor: I'd broken the axe handle when missing a stroke as the com-

The big red fox came boiling out first and took off for the nearby hill with Old Bonehead in hot pursuit.



motion started. Tho brief, it was an exciting, enthralling woodlands drama.

After Bill killed the coon, I looked at his leg and applied iodine from the small first-aid kit I always carried, causing him to holler and swear even louder. With me lugging the heavy coon, we legged it in Old B's direction.

At the hill-top, most astonishingly, "Boney" was throwing a frenzied fit around a good sized brush pile. He ran, yowling and bawling, to us, paying no attention whatever to the defunct coon as I dropped it. Only explanation is, he must have figured it wasn't cricket to have any truck with coons in daylight. Anyway, he made it plain that he had "treed" the fox in the brush pile and was happy about it.

Bill stood back, shotgun at ready, while I climbed on the brush, jumping hard. The fox streaked out on my side, and I dumped it for keeps with the second shot. Old Bonehead whimpered with delight, apparently much pleased with himself. It didn't take much imagination to understand he was saying he could hunt anything, anytime!

We made for the car—me loaded down with corpses, and Bill limping ahead, worriedly cursing his luck and griping about carrying the now useless shotguns. I kidded him some at first, rather half-heartedly, for my gouty foot was hurting, and I had to pause often for a rest. Bill got quite a ways out front, and roared suddenly: "Hurry up, 'Curly!' Here I'm about done for with rabies infection, and you keep stalling." His next blast was even more cutting: "Come on! Or do you want me to carry you, too?" All the way back, "Boney" kept sniffing the fox, whining and wagging his tail in joy, as if to say, "see what I've got!" (Red foxes are rare in this area.)

It was Sunday afternoon; thinking that Doc Johnson would be at the club, we stopped there. He had been called out, but Doc Jordan, our local veterinarian, grinning broadly, volunteered to "take care of good old 'Monkey' before rigor mortis set in."

While Bill was loudly complaining about a vet doctoring him, Doc suddenly grabbed my friend's jaw and neck and took a long look at his teeth. This was a favorite gag of Doc's, when the right opportunity was at hand, and brought shouts of laughter from the room full of interested club members. Bill really blew his gaskets, and took some wild swings at Doc, a burly one-time wrestler, who ducked good-naturedly. Of course, Bill got over it quickly, for his temperature cools as fast as it heats, and he was grinning sheepishly as Doc fixed up his fox bite.

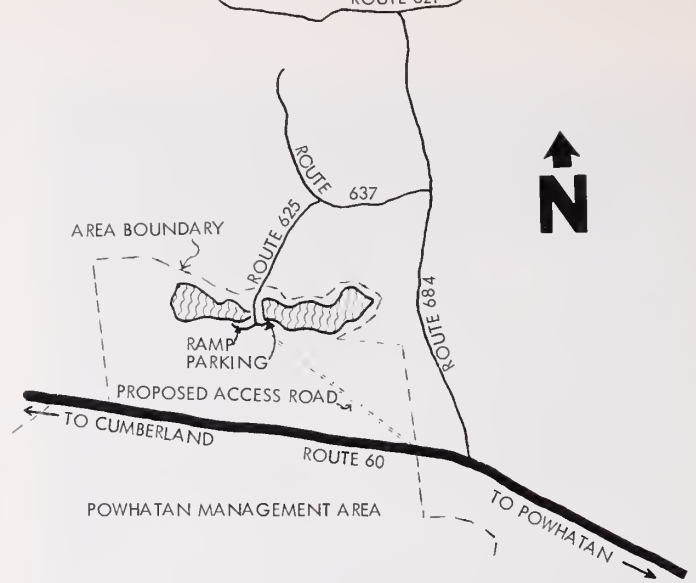
Since, we have debated heatedly whether the fox or the coon was in the down tree first, and which one "Boney" trailed there. Bill staunchly defends his dog, claiming the fox was already bedded down when the coon was chased in. If so, Brother Fox would have had to run right over Mr. Coon to get out first—a neat trick indeed. Further, Bill maintains that the fox must have had coon scent all over him, so Old B. merely thought that he was "treeing" a slightly different specimen of the raccoon family in the piled brush. I don't agree at all, believing that the smart old hound was so greatly interested in the fox because it presented a new challenge to his hunting ability. Because of his actions I'm convinced it was the coon who hit the tree-sack first. However, as Bill says, "The coon was in there, wasn't he?" Since this is irrefutable, I can only reply, "Yeah, but your dog has fooled us more than once through the years with his odd habits, and he's done it again."

So we talk and talk, but Old Bonehead says nothing, so only he will ever know.

COMMISSION-OWNED LAKES:

Powhatan Lakes

By H. L. GILLAM
Information Officer



ALTHOUGH the twin Powhatan lakes in northwestern Powhatan County were at one time an isolated Commission holding, they have now been made an important part of the more diversified Powhatan Wildlife Management Area in that section through the purchase of an intervening tract. Although relatively undeveloped until now, future development will include a camping area, picnic facilities and coordination with other outdoor recreation activities on the Powhatan area.

The upper lake is the largest, with a surface area of 40 acres, and features a fish population consisting of bass, bluegills and chain pickerel. Of the two this lake is the best producer of bluegills and pickerel and the poorest producer of bass. The lower 26-acre lake has a similar fish population but with fewer pike and more bass. Both lakes lie in a wooded setting and have extensive growths of water lily and submerged weeds in shallow areas. Except for a few places, the shoreline is quite brushy and bank fishing

is difficult.

A launching ramp is provided for launching private boats in the lower lake, and small boats may be launched from the parking area in the upper lake. There are no boats for rent at the lakes, and supplies can be obtained either at Powhatan or from business establishments along U. S. 60.

Although the lakes are classified as only fair from a management standpoint because of their large watershed area and shallow, weedy waters, they do produce some good fishing. Fishing pressure is relatively light, with 15 to 20 anglers to be expected on a mid-summer weekend. Bass and bluegill fishing is best in May and June, while pickerel seem to cooperate best in April and May.

Three other lakes are found on the Powhatan area south of U. S. 60. The largest of these covers 9 surface acres, and the others are 7.8 acres and 2 acres. They offer similar fishing, including crappie, which are abundant in the smallest lake.

Commission photo by Kesteloo



CONSERVATIONGRAM

Commission Activities and Late Wildlife News ... At A Glance

GAME COMMISSION REVENUES UP SOME IN 1966-67. Revenues from the sale of over one million hunting, fishing and trapping licenses and permits during the 1966-67 fiscal year brought the Commission of Game and Inland Fisheries \$3,020,300 in revenue. This represents about a 10 percent increase over the previous year, most of which came from the increases in the fees for resident and nonresident bear-deer-turkey licenses approved by the last General Assembly. Sales of resident and nonresident big game licenses and nonresident hunting licenses were down slightly, presumably because of the higher fees.

Some 247,913 residents purchased hunting licenses, and 279,545 fishing licenses of all types were sold. Sales of county and city combination hunting and fishing licenses totaled 126,329, which was slightly below the previous year's total and typical of the downward trend in this type of license over the past several years. Trout license sales jumped about 15% to 83,590. Sales of three-day trip fishing licenses available to residents and nonresidents alike also showed a substantial increase. Sportsmen purchased 128,287 National Forest stamps during the year. Nonresidents contributed \$395,184 through the purchase of hunting, fishing and trapping licenses plus a portion of the \$83,683 received from the sale of three-day fishing licenses.

The revenue from sale of licenses finances the bulk of the Game Commission's activities and services including law enforcement, fish and game management and research, the acquisition and development of public hunting and fishing areas, and the preparation and distribution of informative publications. The Commission's only other sources of funds are receipts from boat registrations, Federal Aid funds allocated under the Pittman-Robertson, Dingell-Johnson, and Land and Water Conservation Act programs, and the receipts from timber sales from Commission-owned lands after counties have been given 25% in lieu of taxes.

VIRGINIA PRELIMINARY SHARE OF FEDERAL WILDLIFE FUNDS TOTALS \$649,800. Virginia's initial apportionment of Pittman-Robertson and Dingell-Johnson funds for the 1967-68 fiscal year is \$649,800. Of this total, \$509,000 is from Pittman-Robertson funds and is allocated for the game work, while \$140,800 is Dingell-Johnson monies earmarked for fisheries projects. This amount represents a 67% increase in game funds and a 145% increase in fish funds over last year's preliminary apportionment.

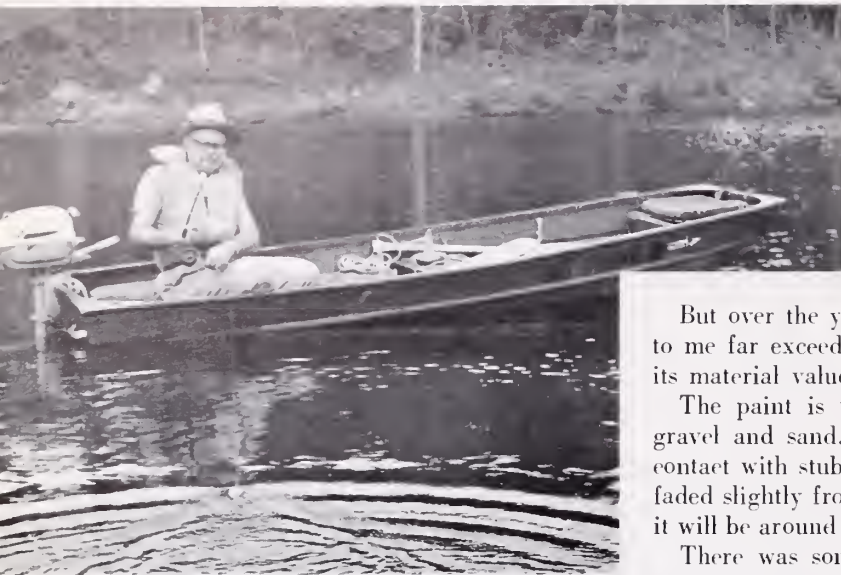
The sources of the funds are a 10% federal excise tax on fishing tackle and an 11% federal excise tax on sporting arms and ammunition. The monies are distributed to the states on the basis of land area and the numbers of licenses sold, and must be matched with at least 25% state money on approved projects. The apportionments from the respective funds are earmarked for projects in that particular realm of wildlife management. The initial allocation amounts to from one half to two thirds of the total for which the respective states qualify.

WESTERN DEER KILL DROPS LITTLE. Hunters bagged 11,392 deer during the two-week season west of the Blue Ridge, a total only slightly below the 12,636 taken from that section last year in spite of the fact that doe shooting was prohibited in 11 counties where it had previously been allowed. In those 11 counties where only bucks were legal game, the kill of antlered bucks increased to 997 from 975 the previous year, not including the does bagged as legal game on opening day in 1966.

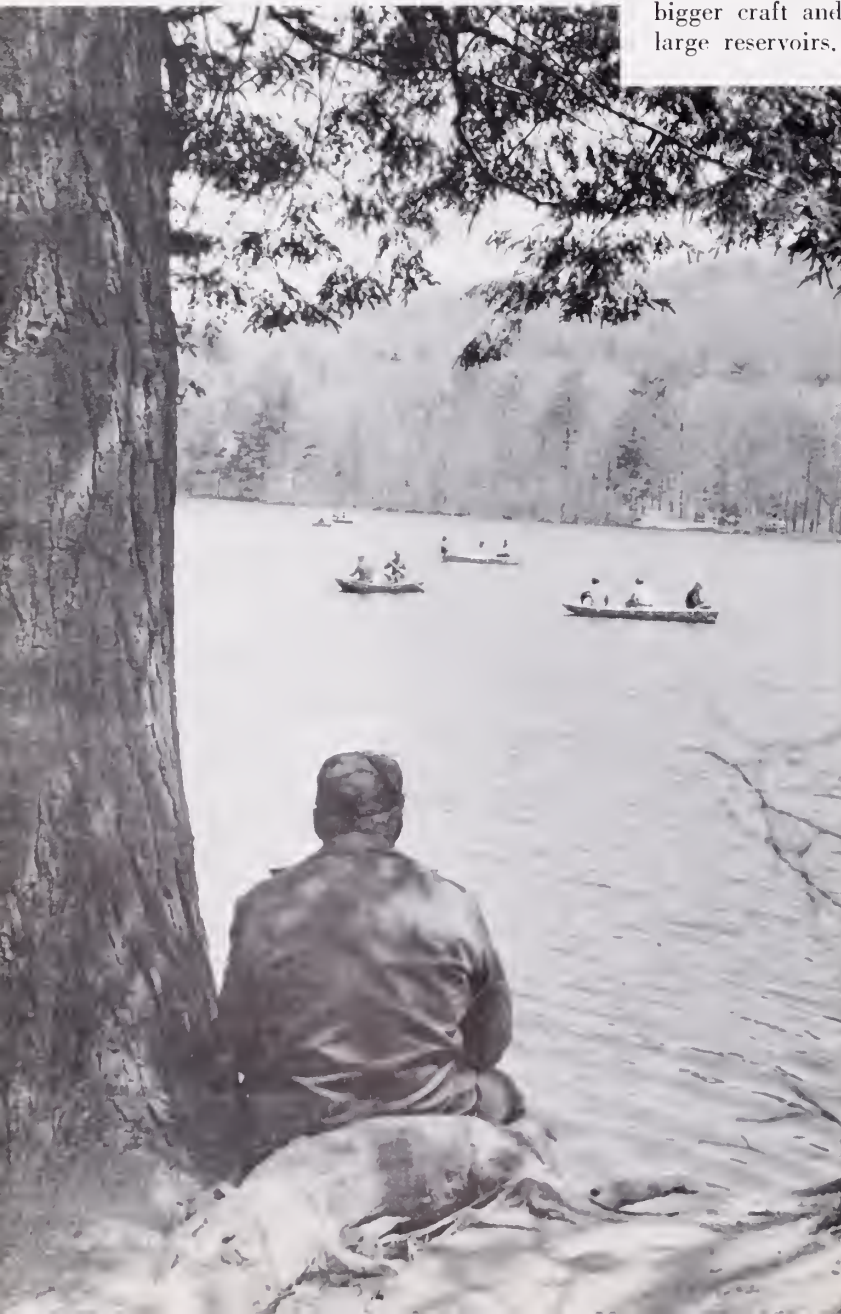
The top three western counties retained their relative standing in magnitude of their deer kill. Bath County remained on top with a harvest of 1,811 animals, an increase over the previous year's take. Rockingham County remained second with a registered kill of 1,175 deer. Augusta County, with a total bag of 1,129 animals, ranked third.

The abundant crop of acorns and other mast in the western mountains is blamed for some of the decrease in deer killed. The plentiful food seemed to keep deer scattered in the woods and prevented normal concentrations in many areas.

JOHNBOAT : Not



Above: Angler works surface plug from his johnboat. Below: Johnboats are best when used for fishing sheltered waters, such as Douthat State Park Lake.



IT'S really not worth much, and some people might go so far as to call it ugly. But my johnboat is a versatile, inexpensive, almost indestructible craft. And it's not for sale.

It's a simple boat, really, as common as common man. It's certainly not the kind of boat in which you'd see one of those rotund fellows wearing a new yachting cap and spotless ducks. Nor is it the kind of craft that boating nuts gather about to eye its lines and speak in an unknown tongue about its hull design, displacement and torque.

But over the years I have grown to love it, and its worth to me far exceeds that which could possibly be justified by its material value.

The paint is worn off the bottom from sliding it over gravel and sand. There are a few dents where it came in contact with stubborn rocks. The green color of its deck has faded slightly from numerous days in the hot sun. But likely it will be around to go fishing a long while after I have gone.

There was some talk of trading it recently, at least my friends talked in this foolish manner. "Since you are getting a bigger boat, let me be the first to put my name in the hat to buy your johnboat," one said.

It was true. I was buying a bigger boat. I needed a bigger craft and motor to use on our growing number of large reservoirs. I needed it partly so I could go farther

faster, but mostly so I wouldn't be swamped in the wake of the increasing number of fools you meet on the water nowadays.

I also needed the extra money my johnboat and three horsepower motor would bring toward trading up to the big boat. But one doesn't sell a part of himself, unless he wants to reap sorrow. No, my johnboat is not for sale.

I guess I started dreaming about this boat long before it came into my life. While in the Army, I diligently saved what I could of my meager pay checks, and one of the first things I did when discharged was to start shopping around for a fishing boat.

I wanted the perfect boat for my needs, so I did some serious looking, reading and thinking on the subject of fishing crafts. What I chose was a 12-foot aluminum johnboat powered by a three horsepower outboard.

You've likely seen these boats countless times—chained to trees along a stream bank, atop cars coming back home after a catch, or on the water working hard to find fish.

I chose the johnboat, because like so many others before me, I was sure it would be the perfect boat for me. I would



Johnboat can be used for everything from fishing to fishing n

Author finds his johnboat stable enough to stand in.



For Sale

By BILL COCHRAN
Roanoke

be using it on small waters—rivers, ponds and the sheltered arms of lakes.

My johnboat is lightweight and compact enough to fit into the back of a station wagon or ride atop a sedan. It weighs about 100 pounds, a simple load for two outdoorsmen. Actually, I can handle it myself, unload and load it, out of the back of a station wagon. Yet, it is roomy enough to carry one companion and myself along with considerable gear.

It has a flat bottom, with shallow enough draft to get me into the weedy, low water areas of a lake where bass are often found, and to float rocky streams, thus reaching stretches of water that often go unfished.

The flat bottom design also makes the johnboat a stable craft. Two men can stand up in one of the bigger, 14 to 16 foot models, and cast with flyrods encountering no trouble. You can shoot ducks out of one without getting spilled. You can even sit on the side, and old John will stay put. This makes it a great outdoorsman's boat.

The johnboat is stable, except when it comes to rough water. Its square bow, designed for roominess, stability under the feet of fishermen and shallow draft, is not made for pushing aside water while cutting through waves. John doesn't move up and down easily in rough water. He likes to stay put. So he takes a beating when the waves whip

high. For this reason, the johnboat can be dangerous on big water around big boats. It was made for smaller waters, and this is where it should be used.

My johnboat isn't speedy, although the three horsepower engine skims it along pretty well. Bigger johnboats can go like the blazes. Under actual tests, a 14-footer powered by a 9.8 horsepower motor with two men aboard zipped along at 19.5 miles per hour.

Add to all the good qualities of a johnboat the important fact that they are inexpensive to buy, easy to care for and will outlast the toughest outdoorsman.

Years ago, if a fisherman wanted a johnboat he simply made one out of wood. An amateur could build one. Thousands did.

Now most are factory-made aluminum jobs. A riveted aluminum johnboat will cost about \$100 to \$400, depending on its size and quality. Considering how versatile they are and how long they will last, they add up to a lot of boat for the money.

It should be stressed, that like most anything else you might be in the market for, some johnboats are better than

others and you should take care in the purchase of one. Examine carefully the thickness of the aluminum. This will vary considerably from maker to maker. Be certain also that the craft is reinforced well with enough ribs or framing. A cheap, weak boat is not as safe, nor will it last as long as one with more thickness and frames. And an outdoorsman does not like shoddy equipment.

There are a great many things you can add to your johnboat. Live bait wells are fairly common. Some johnboats have special compartments for stowing gear. Most will be equipped with floatation under the seat to keep the boat floating even when it is full of water. An optional electric motor works great on one when trolling or casting along the shoreline.

My johnboat has been a companion on countless trips from the Dismal Swamp to mountain ponds, from streams to rivers to lakes. It will go almost anywhere there is enough water to make coffee. At night it provides a good lean-to shelter to camp under. In the winter it will retrieve ducks like a dog.

Sell my johnboat? Not on your life.



Johnboat has shallow draft which will get you where the bass are.

Johnboat offers angler plenty of room for casting, fighting and landing fish. Optional electric motor is a good investment.



thing from exploring swamps
tain ponds.



Observations from the Drumming Log

By ALBERT G. SHIMMEL
West Decatur, Pennsylvania

THROUGH an opening cut in the burlap of my five by five cubicle I could barely define the outline of the log that began at the blind and sloped upward to the stump from which it had been cut. The canvas camp stool was uncomfortable. The air was sharp. An occasional frosted star was visible through the lattice of naked branches. Patches of unmelted snow clung to protected spots. The luminous hands of my watch pointed to 4:28 a.m.

An hour earlier I had fought the impulse to shut off the alarm clock and go back to sleep. What was this strange malady that tugged me from my warm bed and sent me along the old wood trail that skirted the mountain to the stillness of the uncomfortable blind and the chill of the pre-dawn darkness? I shivered in spite of my heavy woollens. The effect of the hasty cup of black coffee had long since worn away.

The stillness was broken by the sound of light footsteps on the frozen leaves. In the dim light a grouse came marching down the slope, his head held high as if aware of his ancient lineage. Each step was proud, calculated and precise. There was a challenging alertness in his bearing. He was every inch a true prince of the woods.

A projecting limb served as a ramp between the ground and the log. When he reached his chosen spot he paused, turned his head slowly and listened intently. Satisfied that no danger threatened, he paced the log from end to end—a country squire inspecting his estate. Returning to the center of the log he stood erect, each feather closely pressed, neat and immaculate.

A second time he walked the log but with his tail fanned to the fullest spread, his wings thrust stiffly down, the outer primaries dragging, and his head withdrawn until it was almost hidden in dark neck ruff. Suddenly he did a quick right-face, gripped the rough surface with his toes, and pressed his spread tail against the log to form a brace. Standing erect he raised his wings; the movements were those of a man who seeks to touch his shoulder blades together while holding his elbows close to his side, his arms upraised and fingers spread. Suddenly the wings were thrust forward and

back, pushing against the air. The result was a hollow thump, strangely muffled. Another thrust and another, at lessening intervals, until the succession was so rapid that there was a blur of both sound and motion. Then just as suddenly as it began it ceased.

The performance at an end the grouse folded his wings, sleeked his feathers, and stood for several minutes listening intently. A dozen times he drummed; then just at dawn another bird, far down the slope, began to drum as if in answer to the first. Immediately the cock before the blind responded and followed the drumming with an intensified strutting display. Twice he varied the routine by pacing the log, his head bobbing in exaggerated time with his steps, his ruff expanded—a movement often observed in domestic roosters when they are about to engage in combat. At times he stood with his head turned in the direction of his rival's drumming, as if striving to determine the exact location of the sound.

At times the grouse walked down the ramp and made a tour of the surrounding area. This inspection included all terrain within a radius of thirty yards. Over this territory he assumed squatter's rights and was prepared to defend it against other males. While making this inspection he paused often, turning invariably toward the vicinity of the challenge. Occasionally he pecked half-heartedly at some bit of food, but generally his attention was centered in the direction of the competing bird. When the other began to drum, he would return to his drumming stand at a run, mount the log and, dispensing with the preliminaries, would drum vigorously. He would then assume a crouching attitude, shake his head and hiss explosively. These displays were indications of territorial claims and willingness to defend these possessions.

At sunup the bird generally wandered away from the vicinity; and although it returned several times during the day, the performance was neither as prolonged nor as enthusiastic as that of pre-dawn. At sunset the bird invariably returned and drummed forcefully until darkness fell. Rarely did it remain for the night but sought a secluded roost

farther up the hill.

Individual characteristics vary from bird to bird. One will continue the ritual in spite of clicking shutters, blinding flashes of photographic lights, and even subdued sounds—providing the source is invisible. Other cocks will flush at the merest suggestion of sound or movement that is unnatural to the habitat.

Two examples of this unnatural behavior are worth narrating. One morning while using my flashlight to find the blind, the beam caught the cock on the drumming log in full circle of its beam. He sat undisturbed while I passed within two yards of his perch. Entering the blind I arranged my camp stool and photographic equipment. He sat calmly through the commotion, and as if the silence that completed my preparations was his cue, he began to drum promptly.

One day during the gunning season I chose a camera instead of a firearm, hoping to accomplish the feat of catching a flushing grouse on film. There had been a fall of snow the previous afternoon that accumulated several inches. Most of the grouse were sitting tight, snugly hidden under the white blanket. Suddenly one exploded from beside a stone. It flew a short distance, then alighted in a tree. With camera at ready I walked slowly toward its perch. It sat quietly while I edged closer after each exposure. When the last picture had been snapped, I glanced at the rangefinder. It read eleven feet. Surely this was an ill or diseased bird, I thought. I clapped my hands sharply. Instantly it thundered away, apparently in sound physical condition.

A friend returning from a training session with his coon hound and seeing a light in my study, stopped to share an unusual experience. He produced not one but two live grouse from his hunting coat, explaining that he had taken them by hand as they perched on a low branch. The next morning he returned them to the cover unharmed.

In the same area where gunners complain that the birds flush so wildly that it is almost impossible to get a shot, I have had the birds drum so close to a blind that their wings will vibrate the burlap. This paradoxical behavior is one of the mysteries that make the study of grouse so fascinating.

What is the motivation for drumming? The seasonal drumming serves to bring the sexes together. When the female is receptive, she enters the territory surrounding the drumming log claimed by the male. Here mating takes place. Many times the nest is also in the immediate vicinity.

Drumming also serves as a warning to rival males. Twice I have witnessed confrontations between drummers. Generally, aggressive action on the part of the owner of the territory is sufficient to cause the other to turn away. The only actual combat that has fallen under my observation consisted of three exchanges similar to domestic roosters. When the invader retreated, the victor followed only a short distance then returned to strut and drum enthusiastically. A fair-sized mirror so placed that the drummer locates it while making his territorial inspection triggers some very interesting reactions.

Occasionally, grouse are heard to drum during the fall months and occasional evidence of drumming during the winter may be found in the snow of the drumming log. I am inclined to believe that these off-season performances are triggered by excess vigor. A sign of pure joy of living.

I killed my first grouse when I was but twelve years of age and have hunted them every season since that time. The challenge of this sport is as strong as ever. The thrill of observing the drumming antics is even greater than the sport of hunting them. Having logged over three hundred hours I still find my heart accelerating to the sound of his footsteps as he marches proudly toward the drumming log, and marvel at the drumming ritual that dates back some twenty-five thousand years.

He walked the log from end to end, his tail fanned, wings thrust stiffly down, head withdrawn and almost hidden in the dark neck ruff.



I HAVE heard it said if you only wanted a glass of milk, why buy a cow! That has turned out to be somewhat my philosophy as far as deer hunting is concerned. I don't mind other people hunting deer as long as they do it legally. As for myself, I believe I will not kill another.

Maybe the first one came too easy. I know of one fellow who has been making annual treks to Bath County for many years and has yet to get his first trophy. Of course he has always been in company with a large party. He has always brought someone else's deer meat home and, I am sure, enjoyed all the fringe benefits associated with a prolonged bachelor party away from home and the wives.

None of that was my lot. You might say I began by being interested in, and a lifelong reader of, hunting and other assorted wildlife tales. Secondly, I am the owner of an old, grown-up, abandoned farm at the foot of the Peaks of Otter. Despite my efforts of several years to change its ways the farm, for the most part, still looks abandoned.

It was evident that the recent population explosion among deer included my land. There were tracks and trails everywhere. In fact I frequently met them in person, even if it was only a startling noise and a fleeting whitetail glimpse on my part.

So after all this stimulation, it was only natural when the

Aubrey Shaw, Jr., photo



POINTS A-PLENTY

By THOMAS M. MARTIN
Bedford

season drew near and my fellow men could talk and plan of nothing but deer that I concluded I might as well get one. Besides, we could eat the meat. There may have been a smidgin of desire to demonstrate that while others made elaborate plans and traveled many miles, taking time off from work, I could accomplish the feat before breakfast, so to speak, and not even miss work.

I did make slight preparation, but it proved deadly for one buck: About two weeks before season opening I leaned a homemade ladder about 15 feet tall against a fork in the trunk of a locust tree. I had read about stands off the ground and can vouch that everything claimed for them is true. I had picked a small clearing, or at least an area in which the uncontrolled brush was not quite as high as the trees surrounding it. There were several crisscrossing deer paths through it, as well as a solid sprinkling of random tracks.

On Sunday night before opening day I drove my camper bus into the farm and parked about 150 yards from the ladder. I had an alarm clock and a pre-prepared breakfast. It turned out the only thing I did not have enough of was covers for my bed. It got mighty cold. I had an auxiliary gasoline heater in the bus, but that could not be safely run while I

was sleeping. As it turned out, there was not much sleep to be had. Between the cold and the traffic of other deer hunters on the short dead-end road I was kept awake most of the night.

I wish I could say that after arising, turning on the heater, and eating my breakfast I went out and promptly shot my buck; but it was not to be. My Monday morning wait was in vain. I drove on back to town and to work.

I tried it again Wednesday morning with same result. As I alternately stood and sat on my ladder I had much time for reflection and observation. I had tied a cord above my head and tied the shotgun to it. My hands were free. I did not have to hold the gun until it was needed. I was about seven miles from Bedford but I could see the lights of town, hear the trucks on the highway, and even hear the factory whistles announcing another working day. It seemed a little incongruous.

Perhaps because of the factory whistles, when my deer did come along on Saturday morning, my third visit to my stand, I had afterthoughts in which I pictured him as just another commuter plodding home after finishing the night shift.

He came very slowly. Just a steady walk. Not making much noise but enough that I could hear him. I had plenty of time to take off one mitten and to think how everything would be spoiled if I should drop that mitten. I even thought that were I to do this again I should tie my mittens to a cord running over my neck like little children's mittens are tied, so I could not drop it.

After straining every nerve and listening and hoping that my heartbeat or breathing would not spook him, I realized that he was approaching so he would pass behind me and not in front through my expected field of conquest. I realized I would have to swivel around. I was sitting with my heels on the rungs of the ladder. I wanted to do it soon enough but not too soon to scare him with noise. Like I said, the elevated stand in my case was foolproof.

By the time I began to swivel he was almost under me. Brush was so thick behind me I could not have seen him till he was within about 25 feet of me. As I swung the gun around, I struck a dead limb with the barrel. Instantly I had another rule for this kind of hunting. Always clear out obstructions even if they are where you do not expect to shoot. At the sound of the barrel hitting the limb the deer just stopped in his tracks, instantly alert. But as I was off the ground, he could neither see me nor smell me. He has no natural enemies who attack from above so he was not alert to danger from that quarter. The eastern sky was light, the rising sun still hidden by low cloud cover. Below me was darker but there was no mistaking his antlers which seemed to be the brightest part of him. I aimed the twelve gauge loaded with 00 buck shot to the best of my ability and story-reading knowledge of the right spot. I am sure my buck fever made me miss his heart, but my shot shattered his backbone.

I had in my pocket then two more shells loaded with buckshot. Three hunting seasons later they are in my desk drawer. Maybe the first one came too easy.

I still have his antlers. One set is plenty. Six points they were. The meat was excellent. Prime quality, but just not to the liking of the family.

I remember also visiting the scene of the dressing out on Sunday afternoon and finding absolute evidence that a bear had dined on what I had discarded from the deer. Maybe those buckshot loads will meet up with one bear some day.

PURPLE MARTINS

Nature's Insecticide

RIGHT now it might be hard for some of us to remember how annoying the flying insects can be in the summer because they left just shortly after the purple martins did. But they will be back again in the spring about the time the martins return.

We can be ready for them in at least two ways. Either we can put up some purple martin houses or we can use chemical insecticides. Which way is best?

An editorial in a recent issue of the *Richmond Times Dispatch* speaks about the evils of the use of man-made insecticides:

The consensus seems to be that the world is going to the dogs. Or to put it another way, the people's moral fibre has been dangerously weakened, and collapse is imminent.

What's the cause of humanity's decline?

Professor E. F. Willmer of Cambridge University, England, an authority on animal and plant tissues, suggests an answer:

Insecticides.

Britons, he says, may be slowly poisoning themselves through indiscriminate use of bug killers.

He points out, according to *AMA News*, that insecticides have killed off nearly all native butterflies in Britain. Far worse, the effect on human beings may be showing up in "the moral deterioration which is said to be affecting Britain—and the world at large."

Other experts have reported that at least some insects have been developing resistance to the chemicals man has been using to kill them.

This raises the intriguing possibility that insecticides will eventually destroy mankind leaving the bugs to inherit the earth. Let's hope they do better with it than men.

Such people as Rachel Carson, *Silent Spring*, and J. W. Wade, *What You Should Know About the Purple Martin*, point out that nature's way of controlling insects is the safe way to do it. Mr. Wade suggests extensive use of purple martins as one alternative to the use of chemical insecticides

By M. W. LOUGH
Elkton



Commission photo by Kesteloo

to control flying insects.

According to *World Book Encyclopedia* these beautiful birds, members of the swallow family, subsist entirely on flying insects and consume their weight in them every day. A single martin has been known to eat 2,000 mosquitoes in a single day.

Many people right here around Elkton have discovered the joys and benefits of having martins around. One area I visited near the Page county line on Naked Creek had seven martin houses in the yards with at least 42 apartments and they were all occupied by martin families.

Swooping, diving, darting through the air, they gobble up insects by the thousands every day. And when they're not busy catching bugs, they watch people. One of their favorite sports is "buzz diving" at human friends. I had this delightful experience when taking pictures of them.

How are they persuaded to live near people? Well, that's really not too hard to do. The first requirement, of course, is a house for them to live in and they're pretty choosy about that. Early in the spring they send out advance scouts to search out suitable quarters for the later arriving families.

These quarters should consist of a house with at least six apartments because martins are gregarious by nature. The size of the apartment should be at least six cubic inches with a two and one-half inch opening for the door. It should be well ventilated and clean. In fact it will have to be cleaned each year after the martins leave.

The houses themselves should be located at least fifteen feet from the nearest tree, house, or other projection because martins need plenty of maneuvering space. Also, the house should be atop a cat- and snake-proof pole about fifteen feet off the ground. This height can be reduced by some four or five feet later for better observing after the martin families have been firmly established. Well treated and protected, the same families will return year after year. Each martin has its own characteristic traits, and the observer will soon begin to recognize and watch for the return of individual birds.

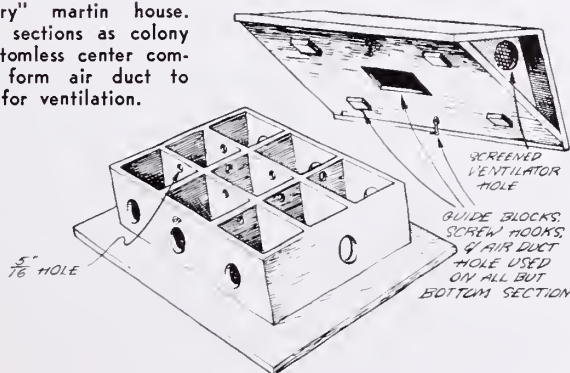
English sparrows can be a real problem in raising martins because they will take over the apartments if allowed to do so. The houses, therefore, should be so constructed that the floors can be removed after the martins leave or else the doors should be plugged until just before the martins are due to arrive in the spring.

There's still plenty of time to get ready for the martins, but one shouldn't wait too long because the flying insects certainly won't.

I don't know whether the situation is as bleak as Professor Willmer tells it but I do know that nature's insecticides, the purple martins, are a lot better to use against flying insects than chemicals because they're cheaper, more entertaining, and less likely to cause the moral deterioration among humans the professor speaks of.

And flying insects cannot build up a resistance to them.

"Add-a-story" martin house. Add more sections as colony grows. Bottomless center compartments form air duct to attic for ventilation.



pimiento, thinly sliced hard-cooked egg, etc. Whatever you work out at this point is governed solely by that surge of the creative artist that dwells in every good cook.

French cookery adheres to the belief that various meats and fowl accept one another without warring, and the tendency is to use a fine white veal stock for the aspic. There is certainly no reason not to do this if you wish. For myself I much prefer to select two or three old birds that would be unsuitable for roasting, and use these as the basis for my stock. Never worry about having any left over; it makes marvelous consommé. If you need to add a little plain gelatin it will not affect the flavor, but go easy—the aspic should hold its shape and that is really about all. An overly stiff aspic is both unattractive and unpalatable.

For preparing the stock I suggest 2 quarts of water and a cup of very dry sherry to 3 birds. Other seasonings according to taste may include any or all of the following: a washed leek split lengthwise or coarsely chopped, including at least two inches of the green top; a small, peeled carrot, sliced; a sprig of parsley; 1 small bayleaf; 6-8 peppercorns; a twist of lemon peels; salt. Do be careful not to put in too much salt at the outset; you will be reducing the stock to take advantage of its natural jellying qualities, and reducing the quantity will increase the salt concentration. It is always better to add to the seasoning later than to try to get rid of an overabundance.

Sautee the raw vegetables selected from those listed above in clarified butter. Use 3-4 tablespoonfuls to start and add more as needed if the vegetables become too dry. Poêle the elderly quail until nicely brown, drain them and lay on top of the vegetables. Cover with the wine-water combination. Cover the kettle and simmer gently until the quail meat literally falls from the bones. Strain the stock very carefully using a fine sieve or old linen so that it will be perfectly clear. Correct the seasoning if necessary. Cool, and remove all the fat. If the cooled aspic is too liquid, add the plain gelatin soaked in water and dissolved in hot stock. You will have to make an educated guess on the amount of gelatin. Certainly not MORE than 1 tablespoonful should be needed at the very outside.

Cool the stock again until it is the consistency of egg albumen. Pour over the quail in each case, and refrigerate until serving time.

Quail served at brunch should most definitely be spit roasted. Although quail are trussed, they are seldom stuffed

with anything other than a whole truffle. Since fresh truffles are not available here, I find it best to skip the whole idea; canned truffles simply do not impart enough flavor used in this way to justify the cost. If you want some extra flavor inside the quail, you might use a teaspoonful of chopped shallot or a slice of the white part of a leek. A large perfectly fresh white mushroom is nice, also.

When your quail are delicately browned and ready to come off the spit, have a crisp slice of bread fried in clarified butter ready to receive each bird. Serve hot with crisp slices of hickory smoked bacon—one slice on each side of the toast. Serve extra toast crisp, hot and dripping butter, and pass a boat of the following sauce:

Sauce for Roasted Quail

½ pound damson plums, pitted

1½ cupfuls red wine

1 tablespoonful honey

½ teaspoonful Worcestershire sauce

Simmer these ingredients until they are "thickish." The mixture will be quite tart. The recipe is based on an ancient Roman recipe for venison sauce and you can, as I did, experiment with it until it suits your taste. Canned lingonberry sauce is much more bland but goes very well with quail, and even whole berry cranberry sauce is good, but somehow that always seems just a bit too common to set off quail!

Quail Normandy is the most festive of all these recipes, and it is by far the simplest to prepare. Other kinds of game birds are equally well-suited to this type of preparation, and if you are a lover of game birds, you probably have had one or more kinds prepared in this way.

Quail Normandy

For 4-6 quail, dressed, trussed and ready for the pan, you need about 6 tart apples. Peel and core these and then chop them coarsely. Fry in butter just to soften and until they become a bit transparent. Lay the apples on the bottom of a roasting pan. Atop the apple layer place the quail which have been fried in butter until brown. Roast to desired doneness. Remove the quail to a hot platter. Smooth the apple sauce with about ¾ cupful sour cream. Correct seasoning. Pass this sauce separately. At the table, pour about 3 tablespoonfuls of warmed Calvados over each quail and flame it. Serve with the apple-cream sauce, hot fried potatoes and a salad of watercress and Belgian endive. Red wine should accompany the meal. A Pinot Noir or a St. Emilion is always acceptable.

One firm that offers a nice selection of muzzle-loading weapons (their own manufacture, plus selections from other reputable makers) is the Dixie Gun Works, Union City, Tennessee 38261. Their extensive catalog, which also lists gun parts and repairs, costs a dollar.

If you are seriously interested in a muzzle-loader, this may well be the best investment you can make.

Another way to look further into the subject before you lay out the long green for a long rifle is to check your county or city library for books on the muzzle-loading rifle. Classified advertisements dealing with arms or shooting supplies is another good source, as is a local gunsmith or muzzle-loading club.

So—whether you take Grandpa's "Old Reliable" and have it restored to shooting condition or purchase a muzzle-loader ready-made, the final result is the same. You'll have the basic ingredient for many hours of exciting outdoor sport and recreation. Good shooting!

Your Own Muzzle-Loader

(Continued from page 8)

to order. Missing parts generally include: Front or rear sights, ramrod, cover to patch box in stock—or even the patch box itself—metal butt-plate and various bolts and screws. The cost for replacement of such parts will be determined largely by the "on hand" supplies at your local gunsmith's shop.

These suggestions are a guide to estimating the final cost of a rifle in safe shooting condition. The final cost may be much lower, if all of the repair and replacement work is done at one time by a single gunsmith.

On the other hand, you may want to purchase a *new* muzzle-loader—yes, they are being made! While these are not antique rifles, they are fine modern reproductions. Often the rifles are copies of original long rifles and will perform fully as well as the "old timers." The current offerings are nice-looking and, best of all, quite inexpensive.

Wilson based his conviction on the manner of kill. Usually the dog will worry a sheep to death, in much the fashion that a small dog worries a rat. The varmint killed swiftly, at the first try, with those fangs in the throat. "It looked," said Wilson, "like this darn thing was just killing without any struggle at all."

The kills were marked also by the manner of eating. The varmint made a small incision to dine on those parts which Wilson calls the "liver and lights." It was neat but wasteful, and the damage bill mounted apace. On one occasion it dropped five of Lineberry's sheep, cut into one of them for the usual liver and lights repast and let the other four lie. In another playful fit of destruction it drove seven sheep into a flooded creek and left them to drown.

The county took action finally to end these depredations, and to settle the question of guilt by collecting evidence in the form of one dead varmint. A bear hunter of good local reputation was hired at \$50 a week, with the promise of a \$250 reward if he ran the killer down.

He put dogs on the trail, but abandoned that effort when the dogs displayed marked indifference to the job at hand. The dogs would follow the killer as far as the ridge line, but there they stopped. Perhaps they were confused by the strange scent, or perhaps they were just adverse to the idea of meeting that thing in the woods. The farmers took it as evidence that dogs will not trail a dog.

The hunter and several others switched then to setting traps on the wooded trails. Presently someone saw a trapped animal threshing on the ridge and hurried down to report that the varmint was caught.

Wilson went up to investigate, and found in the trap a scared, nondescript hound of advanced age and less than average size. He released the dog and took it to his home.

This time Wilson was really in the middle. Some upset citizens reasoned that this was the varmint because it had been caught in a varmint trap. They favored immediate execution. Meanwhile, a woman from neighboring Bland County got wind of proceedings and came over to take a look. She identified the dog as a missing pet, demanded that it be returned to her at once.

Wilson retained his captive and sat tight. "Pretty soon," he said, "there was another killing, as I knew there would be, so I gave the lady back her dog."

The raids became bolder and more frequent. Deciding that more drastic measures were called for, county authorities raised the reward to \$500 and sent off to North Carolina for a hunter of more than local repute.

Grover Wiseman, the North Carolina man, had four Plott hounds which had distinguished themselves in the pursuit of bears. He guaranteed them as dogs which could track anything anywhere. In action, however, they proved disappointing. Day after day Wiseman and his dogs toiled up and down the brush-covered ridges without catching sight of the quarry. Almost every night the coyote turned from hunted to hunter and struck down another sheep. After three discouraging weeks Wiseman gave it up as a bad job.

Two state trappers and a federal trapper tried their luck during the months which followed. The federal man was the only one of the lot to make a catch. He caught a stray sheep.

Tazewell County farmers, meantime, were taking action of their own. Lineberry, the farmer who was hit hardest, staked out half a dozen fat ewes in a pen and ringed the pen with two dozen traps which he buried under light coverings of

straw. The sacrificial offering was staked out in tempting proximity to the varmint's lair, but the varmint would not be misled. It passed the pen by and selected an unguarded sheep from Lineberry's flock.

About 200 traps were placed on the ridge trails which the varmint was known to use. Farmers soaked the traps in grease or smoked them over burning leaves to kill the smell of man. A goodly amount of sheep's liver was expended for bait. The coyote stepped around the traps and continued to get its liver direct from the sheep.

In the valley well-armed men kept watch at night. Wilson, the game warden, laid out with a gun at least one night a week. He recalls one particularly uncomfortable evening which he spent waiting in the crotch of a tree. Also lying in ambush were Lineberry, Moss, Meek, Davis and a dozen others. The coyote, however, had developed an almost unerring instinct for danger. It never struck a farm on a night when the farmer stood guard.

The farmers, of course could not work every day and stand guard every night. The ambush might have been effective if every farmer had watched on the same night, but that arrangement was never worked out. Mountain men have a strong inclination toward independent action. As Wilson remarked philosophically, "every fellow had his own ideas."

The coyote would have been seriously inconvenienced if all the dogs had been turned loose at night. That action, however, was not even considered. Most of the farmers were still convinced that a dog was at fault. The hound caught out after dark was subject to be shot on the spot.

Things stood like that in November when an insurance firm announced that it would no longer honor varmint claims on policies covering loss of Tazewell County sheep. The company said damage payments had run five times the amount of policy premiums during the ten months in which the killer had run at large.

With winter approaching, the farmers waited for a chance to trail the varmint in snow. Presently an opportunity came. Bill Shelbourne, a farmer and part-time hunter, saw fresh tracks as he drove along the ridge road one winter morning. He left his car, followed the winding tracks through a mile or so of heavy brush, and then gave up the chase. Halfway back to his car Shelbourne found another, fresher set of tracks and read a pattern in the snow. As he followed the varmint, the varmint had swung round to follow him!

The act of impudence was in keeping with coyote character. The coyote is cautious, but also curious, and like man it sometimes flirts with danger as a form of sport. With this one the flirtation seems to have developed into a full-time affair.

Bob Davis, one of the hard-hit farmers, was the next man to try his hunting luck. Davis dug a foxhole on the ridge, covered the top with brush and announced that he was spending his nights there until he and the varmint had had it out. The Rev. Elmer Ganskopp, pastor of the Tazewell County Lutheran Church, joined Davis in the lonely vigil. Rev. Ganskopp liked to keep in touch with the personal problems of his parishioners. Besides that, he liked to hunt.

Whether from perseverance, or the power of prayer, the vigil was rewarded on the seventh night. Davis saw the varmint and got a shot. Blood on the snow revealed that he scored a hit.

The varmint fled into deep woods and stayed there for two weeks. Then it returned to the ridge line and the raids began again. With the season of snowfall fast running out, the

(Continued next page)

sheep owners appealed to the county for one final, decisive effort to run the killer down. This time the county supervisors raised the reward to \$2,000, threw in another \$500 for expense money and called in a hunter who claimed national fame.

The job went to Clell Lee, of Tombstone, Arizona, a man who had roped and shot big game from Canada to South America. In addition to experience, Lee came equipped with four hounds of his own "Lee strain," a type achieved by crossing Red Tick hounds, English Bloodhounds and Blue Tick hounds. Finally, Lee came still further recommended in that he claimed distant descent from a Virginia Lee named Robert E. All of this, however, was only reputation. Tazewell County farmers had seen hunters come and go. They were prepared to judge by results.

Lee pegged the killer for what it was, a coyote, and expressed doubt that his dogs could catch and kill it in the mountain forests. The best chance, he said, was to flush it in the valley after men had been stationed along the probable routes of escape.

These arrangements were still being discussed when word came that the coyote had ventured out for one of its rare daylight kills. Lee, the Lee hounds and a posse of about two dozen farmers took off in hot pursuit. They jumped the coyote, ran it for a mile and a half, and lost it on Chestnut Ridge. Two of the farmers got half a dozen shots, but failed to score a hit.

The workout served as a sort of training maneuver for the big operation to follow. Lee appointed key men who were to notify other men, and put together a relay warning system by which the valley could be mobilized on less than an hour's notice. These arrangements completed, he sat back to wait.

Two nights later the coyote snatched another sheep and retired to Meek's Ridge to digest the kill. Meek's Ridge is a low wooded promontory, hardly more than a knoll, which pokes like a long finger into the Burkes Garden bowl. The knoll offered plenty of cover, plus a good view of approaching enemies, and it was only a short scramble from there to safe haven on the wooded peaks. The coyote would have been still safer had it left the valley at once, but that precaution it failed to take.

Lee examined the kill early the next morning and leashed his dogs after they had sniffed out the direction of flight. Meanwhile, Operation Varmint swung into high gear. T. P. Goodwin hurried down to his general store, where he maintains a switchboard for valley phones, and spread the alarm for Tazewell County to take up arms. By 7 a.m. a force of 150 hunters had surrounded Meek's Ridge.

Hugh Cox and his friends were a little late in getting the word. They were still a mile or more from the scene of action when they saw that the hunters were closing in. Thinking that they were out of the action, they stopped at Brown's Cemetery, near the east end of the valley, and took up stop-gap positions just in case.

The coyote meanwhile had been slow to realize that this time the whole county was after its hide. It waited too long on the low ridge and found that escape to nearby high ridges had been cut off. There was only one slim chance left. The posse had been hastily formed, and most of the men had taken up positions on the assumption that the coyote would flee in the direction of nearest safety. Instead, it bellied into tall grass, found a hole in the ring of men, and confounded

the hunters by cutting back toward the open valley.

It almost worked. Hightailing across open ground, the coyote put the hunters behind and made a dash for distant Gose Ridge on the far side of the valley. The line of flight led by Brown's Cemetery, however, and it could not foresee the fact that a belated Hugh Cox crouched beside the cemetery wall. When the coyote was 30 yards off, Cox stood up and went to work with his shotgun. From a point nearby, 18-year-old Alfred Jones opened fire with a .22 rifle. One year and fifteen days after the raids began the varmint's luck had at last run out.

Lee collected the reward, as specified in his contract. Cox and Jones agreed to share credit for the kill. The coyote had absorbed so much punishment that it was impossible to tell which shot had done the business. Anyway, it didn't matter much. An informal coroner's jury rendered a cheerful on-the-spot verdict that Cox and Jones had scored 11 hits in 11 shots.

Congratulations were still being exchanged when a farmer walked up, kicked the carcass, and delivered his die-hard opinion that the coyote looked like a dog to him. It was a good try, but not good enough. The State of Virginia declined to make good on varmint loss.

The coyote, a male of the species, measured 4 feet 3 inches from nose to tail, and weighed 35½ pounds. As an afterthought, Wilson measured the deadly fangs. They were only one inch long. On one shoulder, the killer bore the mark of a now well-healed wound where Davis had scored a hit six weeks before. One toe was slightly twisted, as though it had stepped back once just in time to avoid a trap.

A local radio station picked up the news, and by evening an estimated 3,000 people had lined up for a look at the varmint remains. Many came in cars, and since only one winding road leads in and out of Burkes Garden the event produced the only real traffic jam in the valley's history. In nearby Bluefield, West Virginia, the Daily Telegraph devoted most of page one the next morning to news that "The killer-varmint's reign of terror in Burkes Garden has come to an end." The Bluefield Sunset News used an eight-column banner that afternoon to announce that "Tazewell Breathes Easy Again After 'Varmint' Is Slain."

Wilson went on another hunt, this time for information, after the general rejoicing died down. Presently he came up with a clue as to how and why a prairie coyote turned up in a remote corner of the Appalachian Mountains.

It seems that a man in Oklahoma shipped two half-grown coyote pups to a Virginia man who lives not far from Tazewell County. (For reasons of charity, both parties to this transaction shall remain nameless here.) About six months later the two coyotes escaped from their cage. Shortly after that the raids began.

Further inquiry revealed that just before the raids began, a motorist struck and killed a wild animal at Claypool Hill, 16 miles from Tazewell. The animal was a female, variously described as wild dog and wolf. Wilson talked with those who saw it, and is convinced that it was the mate of Tazewell County's lonesome coyote.

Wilson didn't learn the name of the motorist, but if the man will identify himself in Tazewell County he will be warmly received. One varmint made things very lively for farmers, hunters and sheep—with two varmints and a pack of varmint pups the farmers might still be standing guard at night.

Bird
of the
Month:



Goldfinch

By DR. J. J. MURRAY
Lexington

HERE is a bird known to every country boy. He may not know it by its book name, goldfinch. He may call it "wild canary," or "lettuce bird," or "thistle bird," but he is perfectly familiar with its habits and its food.

This boy will probably not know the scientific name of the goldfinch, *Spinus tristis tristis*. The first part of this name is a general term for small sparrow-like birds. The *tristis* part means "sad," from the supposed quality of its note. To me there is nothing sad about it, though at times the note may sound somewhat meditative. As the bird swings along in its undulating flight the note seems cheerful. It is "per-chic-o-ree, per-chic-o-ree," with the accent on the second syllable. This is the flight note; the song is loud and varied, somewhat like a canary's.

It has a remarkable variety of plumages. The adult male in summer is bright yellow, with cap and wings and tail black. It has a white bar on the wing. The female has no black cap, its back is a duskier yellow, and the black in wings and tail is not so decided. In winter the adults are duller, while the immature male is duller still.

One of our latest nesters, the goldfinch enjoys a long, free summer. They fly about in flocks, feeding where they like. When a flock alights, the birds drop through the air with an erratic, zig-zag flight, like snowflakes, or small pieces of paper turned here and there by the wind.

I have found nests from July 16 (young in the nest) to

August 27 (first egg). In late nests the young may not hatch until well into September. In a nest I watched for some time the female came to feed every four or five minutes, the male always following her, waiting in a nearby tree. They were silent as they came, but as they left the female called "per-chic-o-ree."

The nests are beautifully made of plant fibers and thistle down. I have found them at less than four feet in a small *Eleagnus* bush and as high as 70 feet in a sycamore on the bank of the Maury River. It has been suggested that the delay in nesting is due to the fact that the birds are waiting for thistle down. Three to 6 dull bluish-white eggs are laid.

These birds are very fond of sunflower seeds. If you want to see them, you only have to plant sunflowers. They can also eat an amazing number of thistle and dandelion seeds.

Anywhere in Virginia goldfinches may be found throughout the year. From Charlottesville east they are more common in winter, while in the mountains summer is their main season.

In spring, by late April, flocks pass through, crowding the maples and elms, eating the buds, and singing in chorus. At this time all stages of plumage can still be noted, although many are already in bright summer plumage. They are still in flocks around the end of June. Again, in late August, flocks are moving south, while some pairs are still nesting.



Edited by HARRY GILLAM

More Evidence of Stripers in Smith Mountain Lake



Larry Martin, Sr., of Martinsville, holds a 3-pound striper which he caught in Smith Mountain Lake last summer. This and other reports indicate that a number of the striper fry stocked by the Game Commission over the past several years have survived in the lake.

Game Wardens Turn in Record Performance

The Commission of Game and Inland Fisheries' 110-man game warden force set new records in every phase of recorded warden activities during the 1966-67 fiscal year. The area patrol leader system initiated a little over a year ago is credited with much of this accomplishment. Better scheduling and coordination of the work has resulted in the most productive work record in Commission history.

A comparison of the results under the two systems is the conviction record during June, 1965, and June, 1967, during which, by coincidence, the men worked exactly the same number of hours (12,786) on fish patrol. In June, 1965, a total of 565 persons were prosecuted for fishing law violations while in 1967 a total of 888 were arrested, mainly because of better scheduling of checks to coincide with areas and times at which the need was greatest. The total record for 1966-67 showed 1345 more court cases than the previous year's 7388.

During the year wardens inspected 48,562 boats, which represents over 60% of the 67,744 motorboats registered in Virginia. They checked 73,330 hunters and 161,968 fishermen during the year.

Their extra efforts were not limited to the realm of law enforcement. They

found time to train 9804 young hunters in the fundamentals of hunting safety, nearly twice the number trained the year before. They supplied license agents and sportsmen with over a million pieces of informative literature on laws and outdoor recreation facilities. The Law Enforcement Division says that tremendous progress is evident in the promptness and accuracy of reports and that the system has freed District Supervisors of many menial tasks, allowing them to concentrate fully on major enforcement and related problems within their districts.

Trout Fishermen May Gain From Dam in Botetourt

A proposed 4,500 acre Hipes Reservoir on Craigs Creek in Botetourt County could bring Virginia fishermen a 15-mile stretch of top quality trout water. The 175-foot high dam under consideration would be built by the U. S. Army Corps of Engineers as part of the Federal Government's Appalachian Regional Development Program.

It would be state and/or local responsibility to provide one-half of the costs of acquiring right-of-way on the 15-mile section of Craigs Creek between the dam and the James River in order to develop the tailwater trout fishery. A bottom-draw feature of the dam would permit keeping the temperature and flow of the now marginal trout stream at optimum levels.

Boy Sets Lake Brittle Record



Lake Brittle already holds the state channel catfish record, and now it appears they are working on the bass mark. This 8 pound 3 ounce specimen taken by 16 year old Tim Race of Warrenton is a record for the Commission-owned lake but quite a way from the 12 pound 8 ounce state record.

Hunter Safety Training Given Amherst County Youth



This massive assembly is a group of 459 Amherst County High School students who successfully completed the Game Commission-NRA hunter safety course prior to the hunting season. Game Warden R. B. Chenault of Amherst handled the instruction with assistance from Warden Gordon Preston of Rocky Mount. Allen Campbell, athletic director for the school, scheduled the six classes each day during the 4-day instruction period.

1966-67 Fur Harvest Down

The number of furs harvested in Virginia last trapping season took a marked drop, according to reports that wholesale and retail fur buyers submitted to the Commission of Game and Inland Fisheries. The bulk of the decrease was in muskrat pelts which brought little financial return to the trappers. The number of rat pelts handled dropped from 256,839 the previous season to 184,807 last year.

The overall fur take declined nearly 30% from 377,768 in 1965-66 to 270,766 last year. In addition to muskrat pelts the catch included 44,321 raccoon pelts, 14,916 deer hides, 7,369 opossum pelts, 6,289 beaver pelts, 3,716 mink pelts and 1,406 otter. The fur totals also included 3,412 fox skins, 4,129 skunk pelts, 248 weasel pelts, 117 bobcat hides and 36 bear skins.

The general trapping season for mink, muskrat, raccoon and opossum, which began December 1, continues through March 10 in most counties. Beaver and otter trapping is limited to a period beginning January 1 and ending February 15.



YOUTH AFIELD

Edited by ANN PILCHER



Much Interest Shown in Wildlife Food Patch Program



Courtesy The Orange Review

Winners of the 1967 Orange County wildlife food patch contest, open to members of the county high school's Future Farmers of America chapter, are shown with Game Warden Bill Crickenberger and FFA sponsors Lewis Williamson, left, and Robert E. Taylor, right. Ricky Colvin, of Somerset, was named top winner. Danny Yancey, T. D. Feldman, Tim Boston, and Thomas Graves took 2nd through 5th places. Conservationists James Hale and Tom Ragsdale selected the winning patches, which were judged on location, cover, success of growth, game use and nearness to a water supply. A bank, game and fish association, and several businesses donated prizes.

To encourage youth to be active in farm related programs and to reward boys old enough to do the work themselves, many organizations over the state sponsored wildlife food patch contests in 1967. Some are mentioned here.

Competition was keen in Pittsylvania, reports P. J. Myers, Vocational Agriculture Coordinator. More than 400 Vo-Ag students participated from the county's six consolidated high schools. Top county winner was W. K. Pearson, Gretna High junior. Burton Phelps, Tunstall High, was second. Other winners included Louis Luck, Northside High; Jim Gregory, Chatham; Wallace Clark, Dan River; and William McKenzie, Southside. The county Izaak Walton League chapter presented awards of \$25, \$15, and \$10 to the three top winners.

In commending FFA members and their advisors for participation in the food patch project, E. L. Shelton, Pittsylvania IWL president, stated, "Anything we can do to help youth appreciate our wild game is money and time well spent." Game biologists C. H. Shaffer and Hal Myers served as judges.

The Fredericksburg-Rappahannock



U. S. Soil Conservation Service photo

From left: Donnie Adams, Randy Hall, and Dale Clark were \$5, \$10, and \$15 winners respectively in the 1967 wildlife feed patch contest sponsored by the Keysville Ruritan Club. Open to Randolph-Henry High School FFA and 4-H Club members, the contest was promoted by the Ruritans' Conservation and Forestry Committee. Judges D. L. Tharpe and C. D. Torrence, State Game Wardens, found signs that the patches were already being utilized by wildlife at the time of judging.

First Deer—10 Pointer

Ten-year-old Michael Vandemark, Arlington, is shown with his father and his first deer kill—a 10 point, 140 pound buck taken on the Marine Corps Schools reservation, Quantico, on November 25, 1967. Michael was using a 20 gauge shotgun.



Chapter of the Izaak Walton League of America awarded prizes totaling \$200 to 16 students, four each from Spotsylvania, Stafford, C. T. Smith, and Caroline County High Schools. Chairman Francis Boggs reported 246 food patches planted to help wildlife during the winter months.

Vernon C. Williams and his brother, Kenneth D., who placed first and second in Brunswick County's seed plot contest, won a day's free hunt on the White Oak reservation with state game warden Gerald Fry. Expenses of the day's hunt were paid by the Central Brunswick Ruritan Club. John Baber, Tommy Hall, George Taylor, and Ronald Dorrier were winners of the contest sponsored by the Buckingham Game Conservation Club. Roger Slagle, Appomattox High senior, was selected as winner of the Robert E. Lee FFA sponsored food patch contest, with Marshall Doss runner-up. Westmoreland's Historyland Hunt Club, Inc., which has sponsored an annual food patch contest since 1959, awarded prizes ranging from \$25 to \$2; all contestants received a year's subscription to *Virginia Wildlife*.

Seed for the wildlife plots, financed through a tax on sporting arms and ammunition, was furnished by the Game Commission and consisted of a mixture of annuals, including buckwheat, lespe-deza, milo, millet (brown, German and pearl), peas, rape and soybeans.

W. K. Pearson (left) stands in his winning Pittsylvania patch next to Gretna High principal Earl Johnson. Mr. Johnson gave much of the credit for student interest and participation to A. B. Culbertson (right), Vo-Ag teacher who holds a masters degree in wildlife conservation.



ON THE WATERFRONT



Edited by JIM KERRICK

A Good Anchor Is Important

Although anchors are not required equipment on small craft, too many pleasure boatmen ignore the importance of carrying a good anchor and adequate line aboard.

Along with being a parking brake, anchors often mean the difference between a wrecked boat and one that safely rode out a storm.

If all anchors look alike to you, it's time for you to consult a qualified marine dealer. Like most other equipment anchors come in all shapes and sizes, and when buying, be sure the type and size fit the design and weight of your boat, as well as the waters she will be used in.

Although an empty paint can filled with cement qualifies as an anchor, these homemade specials do not have the extra margin of safety for the unusual situation.

Just as important as your anchor is the anchor line. Make sure it is strong enough and long enough to anchor your

This vinyl dipped preserver is among a number of styles no longer approved. They have a tendency to shrink, especially during cold weather, making them nearly impossible to wear. Even these bearing labels indicating Coast Guard approval are NO longer acceptable if the label bears the number 160.055.



boat safely. A good rule to follow is to have a line at least six to eight times as long as the depth of the water where you are anchoring. The longer the anchor line, the greater the holding power.

One last thing. Be sure your anchor line is secured to your boat. An anchor line that is not secured can cause you a lot of trouble, and a red face.

Life Preservers

Vinyl dip coated unicellular plastic foam life preservers *not slit down the front* are NO longer approved and NO longer accepted as U. S. Coast Guard approved equipment if the label bears the number 160.055.

Unicellular plastic foam *cloth covered* life preservers not slit down the front are NO longer being approved, but those now in use will continue to be accepted provided they carry an approval label and are in good serviceable condition.

Both cloth covered and vinyl dip coated unicellular plastic foam life preservers that are slit down the front are approved and are accepted provided they are in good serviceable condition.

This preserver, cloth covered unicellular plastic, is NO longer being approved, but is acceptable providing it bears the U. S. Coast Guard approved label and is in good serviceable condition. This style preserver also has the tendency to shrink in cold weather making it difficult to put on and wear.



Display of Name on Documented Vessels

The name of a documented vessel, except documented yachts, shall be marked in full upon each bow and upon the stern, and the hailing port shall also be marked in full on the stern.

These names shall be painted, carved, or gilded in Roman letters in a light color on a dark ground or in a dark color on a light ground, and shall be distinctly visible. The letters shall be not less than four inches in height.

Every documented yacht shall have its name and hailing port placed on some conspicuous part of its hull.

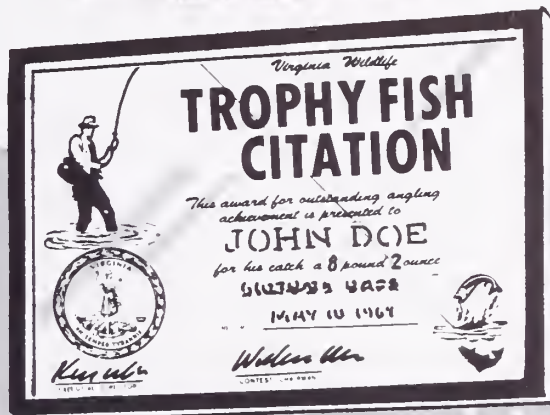
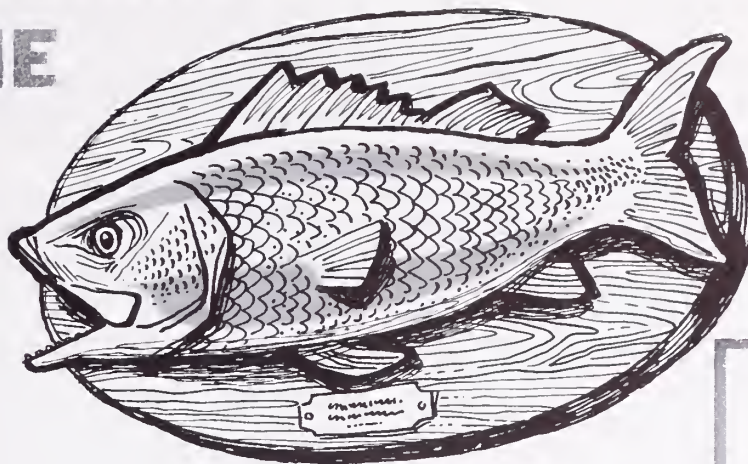


This type of preserver, NO longer approved, has proven to be inadequate, especially in cold temperatures, because the preserver shrinks making it nearly impossible to don.

ALWAYS REMEMBER

THAT BIG ONE

with a VIRGINIA WILDLIFE TROPHY FISH CITATION . . .



CITATION SIZES FOR 1968

Largemouth Bass	8 lbs.
Smallmouth Bass	4 lbs.
Kentucky Bass	3 lbs.
Sunfish	1 lb.
Rock Bass	1 lb.
White Bass	2 lbs.
Crappie	2 1/2 lbs.
Striped Bass	10 lbs.
Pickereel	4 lbs.
Walleye	8 lbs.
Brook or Brown Trout	2 lbs.
Other Trout	5 lbs.
Muskellunge	6 lbs.
Channel Cat	10 lbs.
Flathead Cat	20 lbs.
Carp	20 lbs.
Gar	10 lbs.
Grindley	10 lbs.

RULES:

Fish must be caught in Virginia Waters by legal methods during seasons open for the taking of the species involved.

Fish must be weighed at a public scales that is periodically inspected by the Commonwealth of Virginia.

Photographs are desirable as further proof of authenticity but are not required.

Non-residents as well as residents are eligible for citations if fish are caught under the above conditions.

Applications must be submitted within 60 days of the date of catch to be eligible.



APPLICATION FOR VIRGINIA FRESHWATER FISH CITATION

Angler's Name _____
 Address _____
 City _____ State _____ Zip _____
 Kind of fish _____ Weight _____ lbs. _____ oz.; Length _____ inches
 Where caught _____ Date caught _____
 Weighed at _____ (store or other public scales)
 Weighing witnessed by _____
 Signature _____ Address _____
 How caught—Fly Rod ☐ Spinning Rod ☐ Casting Rod ☐
 Trot Line ☐ Other _____

COMMISSION OF GAME AND INLAND FISHERIES

P. O. BOX 1642 • RICHMOND, VIRGINIA 23213

HOW TO
MEASURE:



HUNTING DOGS

by William D. Rodgers Jr.



POINTER



ENGLISH SETTER



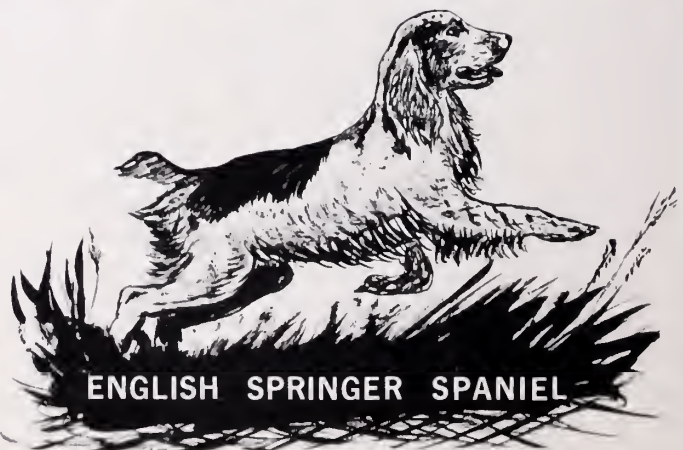
CHESAPEAKE BAY RETRIEVER



GORDON SETTER



GERMAN SHORTHAIRED POINTER



ENGLISH SPRINGER SPANIEL